Sharon Hosegood
ASSOCIATES

UPDATED ARBORICULTURAL METHOD STATEMENT REPORT
BS 5837:2012 '*Trees in relation to design, demolition, and construction' - recommendations*

PURSUANT TO RE-DISCHARGE CONDITION 16 OF 2020/3737/P

SITE:

Camden Road Hostel, 248-250 Camden Road, Camden, London, NW1 9HE

CLIENT:

London Borough of Camden c/o Morgan Sindall Construction and Infrastructure Limited

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DATE: April 2024
OUR REF: SHA 1741 AMS

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Executive summary

This report provides updated information in accordance with the tree related planning condition 16 of 2020/3737/P for redevelopment (*full description at 4.0*) at Camden Road Hostel, 248-250 Camden Road, Camden, London NW1 9HE. All information provided is in accordance with BS 5837:2012 '*Trees in relation to design, demolition and construction – Recommendations*'. The previous Arboricultural Method Statement (AMS) reference *SHA 1018 Camden Rd Hostel AMS March 2022* was approved. Since that time, the site has been demolished in accordance with the AMS and the construction phase has been planned. This report supercedes the previous AMS due to the need for construction phase arrangements to diverge from the previously discharged details, and is a submission to re-discharge the planning condition.

This report follows a re-survey of the trees and close team working. There are no new negative impacts on trees, the landscaping scheme under T5 cherry tree is greatly beneficial to the tree and prevents future maintenance issues, and T14 lime can now be retained.

The purpose of this report is not only to provide information in relation of planning condition 16, but importantly, to provide clear recommendations during construction. The key areas of information are the following:

- The tree protection plans (appendix 2) showing areas where method statements apply.
- The tree surgery schedule (appendix 4).
- The discussion sections at 3.0 and Method Statements at 5.0.

Arboricultural site supervision is recommended at the following key stages:

- A pre-commencement meeting to check and discuss tree protection measures. The Arboricultural Officer to be invited to this meeting.
- During the installation of the piling mat near T9 – T12.
- During the installation of drainage.
- During changes of hard surfaces near trees.

Visits will be recorded and the site supervision notes will be sent to Camden Council via the client, as an audit trail.

Contents

Appendices

1.0 Introduction

1.1 This report is for the purpose of providing updated information, following demolition and construction details, to comply with the requirements of planning condition 16 for redevelopment at Camden Road Hostel, 248-250 Camden Road, Camden, London NW1 9HE .

1.2 This report follows the approved Arboricultural Impact Assessment reference *SHA 1018 AIA* and the approved Arboricultural Method Statement reference *SHA 1018 AMS March 2022*. This document is a submission to re-discharge condition 16 and supercedes the previous AMS. It follows a re-survey of the trees and close design team working. The approved AMS references the potential removal of T14 lime for a substation. As the substation is in a location which has less impact on trees, T14 will be retained. There are no new negative impacts on trees.

1.3 This report is intended for submission to Camden Council and for use by the contractor on site. Technical words are described in the glossary at appendix 9.

2.0 Statement of instructions and issues discussed

2.1 I was instructed by London Borough of Camden c/o Morgan Sindall Construction and Infrastructure Limited to carry out the following:

- Work with the team to discuss the tree issues.
- An Arboricultural method statement required by condition 16 of planning consent.
- A tree protection plan and tree protection specification.
- A site supervision schedule as required by condition 16 of planning consent.

All works are to BS 5837:2012 '*Trees in relation to design, demolition and construction – recommendations*' (BS).

2.2 The issues discussed are the condition of the trees on site, the impact from the approved development and the long term view of the treescape for the site.

3.0 The trees:

3.1 *Generally*: There are 8 individual trees which form the subject of this survey. Full details of the trees are found in the tree tables at appendix 1 of the Arboricultural Impact Assessment and the information is not repeated here. There are no substantive changes to tree condition, other than the very heavy pruning of the offsite lime tree (T1).

3.2 *Legislation:* The four London plane trees on the frontage (SHA T9, T10, T11 and T12) are protected by a Tree Preservation Order (TPO C510 2005)**.** Consent has recently been granted for pruning back to the previous points (reference 2021/5989/T) and has been carried out. The remainder of the trees are protected by virtue of being in Camden Square Conservation Area. Appendix 7 provides further details.

3.3 *Tree retention and removals:* There are no changes to tree surgery requirements from the AIA other than the certainty that T14 lime can be retained. The impact on trees is summarized below:

Tree	Pruned	Specialist work requirements	Arboricultural supervision
T1 lime	No	Sheeting piling slightly adjusted in case there are roots below the wall's foundations.	No
T5 cherry (B)	Yes – minor works	*Tree protection:* Tree protection fencing adjusted for scaffolding, Area outside of fence within RPA to be protected by ground protection. Sheet piling in outer edge of root protection area (RPA). *Services:* Installation of drainage in outer edge of RPA in accordance with section 5.5. *External works:* Change in surfaces from grass to a bark path, self-binding gravel and new planting. Section 57	Yes - inspection No Yes Yes
T9, T10, T11, T12 London plane and T13 lime	No Long term re-pollard	*Tree protection:* Hoarding to be maintained, other than a gap made for the access to existing steps. Ground protection on top of tarmac for reinforcement. *Welfare:* Installation of cellular confinement system within raised planter for toilets. Drainage, water and electricity to be in above ground ducts. Toilet block to be craned in.	Yes – inspection Yes, for base Yes

		Piling mat: If carried out before drainage, installation to be carried out in accordance with method statement at section 5. 4. *Substation near T9*: Foundations are likely to be no deeper than the wall foundations. *Services:* sheet piling may be required in some parts of the drainage run due to depth of construction required. *External works*: Removal of cell web and re-landscaping at the external works phase.	Yes Yes Yes Yes
T14 lime	No Long term re-pollard	*Tree protection:* Hoarding to be maintained. Ground protection on top of tarmac for reinforcement. *Welfare:* Installation of cellular confinement system within raised planter for welfare. Drainage, water and electricity to be in above ground ducts. *Drainage:* Sheet piling may be required in some parts of the site due to depth of construction required. *External works:* Removal of cell web and re-landscaping at the external works phase.	Yes – inspection Yes, for base Yes

3.4 The following photographs were taken on 22.12.2023.

Photo 1 of T9 – T14 looking approximately north

Photo 2 of T9 – T14 looking showing internal struts and above ground stillages

Photo 3 of T1 looking approximately east.

3.4.1 The tree has been heavily pruned since the original survey. The Geotechnical Report by Pell Frischman reference 1923227 R01 (00), carried out a trial pit investigation to determine the foundation of the wall (TP107). This found at 4.1 'Foundation inspection pit location TP107 was completed to a maximum depth of 1.3m due to the presence of services. The walls foundations were still present at that depth. It is clear that this wall is a root barrier to T1 lime and no special measures are required in terms of protecting onsite roots, as there will not be any.

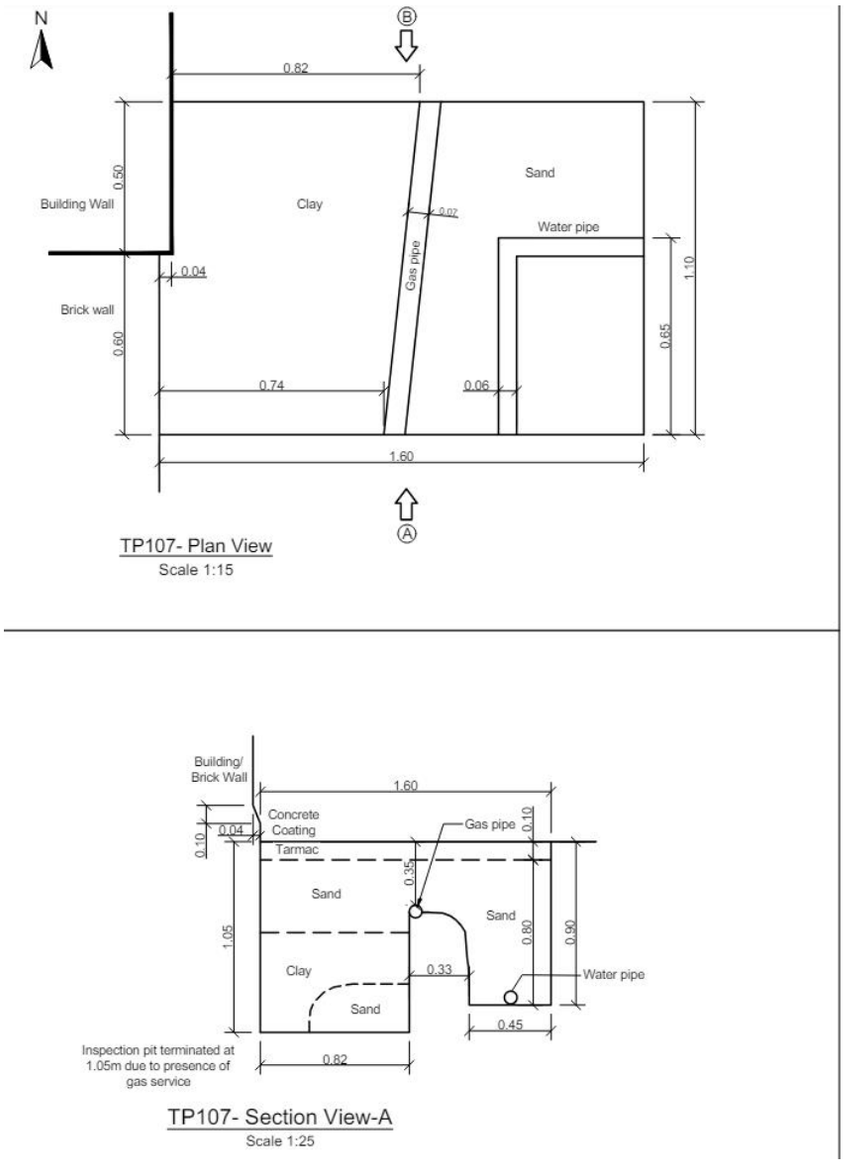
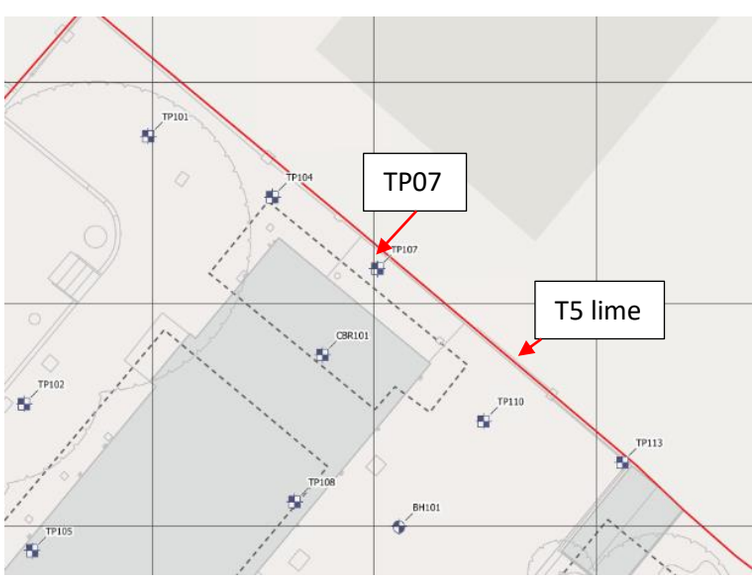


Image 1 from page 312 of the Geotechnical Report.



Plan 1 – extract from the Geotechnical borehole plan. Do not scale, north is vertical

Photo 4 of T5 looking south towards the boundary

4.0 **The approved development and construction programme**

4.1 Planning consent was granted on 11 May 2021 for '*Redevelopment of the site to include demolition of existing hostel building and the erection of a new 4-6 storey plus basement hostel building (sui generis use) with external stairwell and rear balconies to all levels; erection of 2 x single storey garden buildings; associated works including installation of plant equipment, parking and access arrangements and tree and landscaping works. (Information for the purpose of consultation: the proposed development provides 39 units, which comprise 36 x studios, 2 x 1-beds and 1 x 1-bed wheelchair accessible unit'* at Camden Road Hostel, 248-250 Camden Road, Camden, London NW1 9HE

4.2 Planning condition 16 requires the following pre-commencement information:

'Tree protection measures:

Prior to the commencement of any works on site, details demonstrating how trees to be retained shall be protected during demolition and construction work, to include a method

statement for the construction of foundations within root protection areas of trees to be retained, shall be submitted to and approved by the local planning authority in writing. Such details shall follow guidelines and standards set out in BS5837:2012 "Trees in Relation to Construction". All trees on the site, or parts of trees growing from adjoining sites, unless shown on the permitted drawings as being removed, shall be retained and protected from damage in accordance with the approved protection details.

Reason: To ensure that the development will not have an adverse effect on existing trees and in order to maintain the character and amenity of the area in accordance with the requirements of policies A2 and A3 of the London Borough of Camden Local Plan 2017.'

4.3 This condition was discharged following receipt of the former AMS which discussed demolition. Approval of Details Granted reference 2021/5557/P was granted on 15 March 2022.

5.0 **Arboricultural method statement**

5.1 Generally

Development can harm trees if not carried out carefully. Trees crowns and trunks can be damaged by machinery or scorched by fire or chemicals. Tree roots can be asphyxiated and die if the rooting zone becomes compacted and the soil structure damaged. This can happen very easily, particularly on clay soils, even with the passage of light vehicles. Tree roots can be damaged by raising or lowering the ground level. In some cases, it can take several years for the damage to become apparent. This report details how the approved development will take place whilst ensuring that the trees shown for retention can be protected, and for the protection of the soil in the areas for new planting. The site logistics proposal plan (reference S01 R07) by Pure Logistics is found at appendix 2.

5.1.1 *Fires:* Fires on site should be avoided if possible. If unavoidable, they should be situated far enough so that there is no risk of damage to the trees, taking into consideration the wind direction.

5.1.2 *Site and fuel storage, cement mixing and washing points:* All site storage areas, cement mixing and washing points for equipment and vehicles and fuel storage areas should be outside root protection areas unless otherwise agreed with the Local Planning Authority. No discharge of potential contaminants should occur within 10m of a retained tree stem or where there is a risk of run off into Root Protection Areas.

5.1.3 *Temporary buildings for site use:* Site cabins, trailers and other temporary buildings can sometimes be used in root protection area if consent is agreed by the local planning authority.

This can be very useful if there is a robust existing hard surfacing in place. The method for installing the buildings, and assessment of whether ground protection is needed has been agreed with the Arboricultural consultant and the details are in this report

5.1.4 *Protection of tree canopies:* Piling rigs and cranes are often used close to trees. Work must be carefully planned so that there is sufficient room to avoid hitting the canopy during transportation or operation. The crane base shown on the site logistics proposal plan does not cause a conflict with trees. The scaffolding outline is shown on the plan *SHA 1741 TPP2 A*.

5.2 Tree surgery

Recommendations for tree works can be found in the tree surgery schedule in Appendix 4. All works shall be in accordance with BS 3998:2010 Tree work. Recommendations'. The use of a competent tree surgery contractor is necessary to comply with this. The main contractor and tree surgery contractor must ensure that any necessary consents have been received from the local authority and that no protected species are harmed whilst carrying out site clearance or tree surgery works. The only works required is the light pruning of the cherry tree T5.

The following information must be sought:

- Current employers, public and product liability insurance
- Waste carriers licence
- Qualification and experience of key personnel, including relevant NPTC certificates
- COSHH assessment
- Tool and task based risk assessment, including a Working at Height Risk Assessment
- Site specific risk assessment
- Emergency procedure plan
- Method Statement

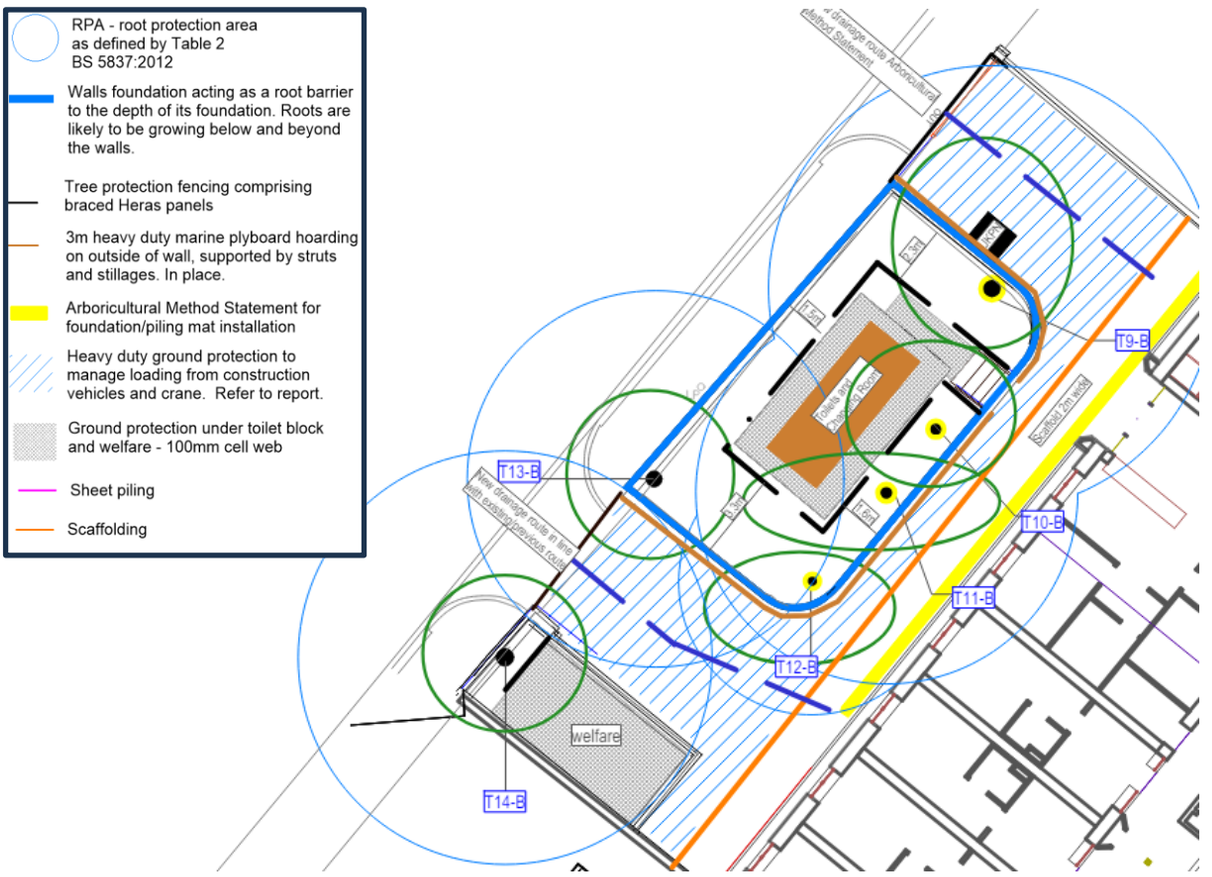
A list of suitable tree surgeons is found at: http://www.trees.org.uk/find-a-professional/Directory-of-Tree-Surgeons

Bio security measures are important and found at https://www.forestry.gov.uk/biosecurity

5.3 Tree protection during works including hoarding and site set up

5.3.1 Site hoarding is in place around the trees on the frontage (T9 – T13) and will remain in situ apart from a gap to enable access to use the steps up to the toilet block. This is shown in photographs 1 and 2. The hoarding near T14 will need to be set back towards the tree,

potentially replaced with tree protection fencing. Within the raised bed, the existing steps will be accessed.



Plan 2 – extract from SHA 1741 TPP2 A. do not scale, north is vertical.

5.3.2 Both the welfare unit and the toilet block will be installed on ground protection which will protect the ground below from compaction and deformation from the loading of the units. A suitable product in terms of arboriculture is a cellular confinement stem, filled with no fines stone. An example of a suitable product is http://www.geosyn.co.uk/product/cellweb-tree-root-protection. Typically, this is likely to be 100 - 150mm deep dependent on the Civil Engineers assessment.. An installation method is found at https://www.geosyn.co.uk/wp-content/uploads/2016/05/Installation-Guide-Cellweb-Installation-Guide-81-3.pdf.

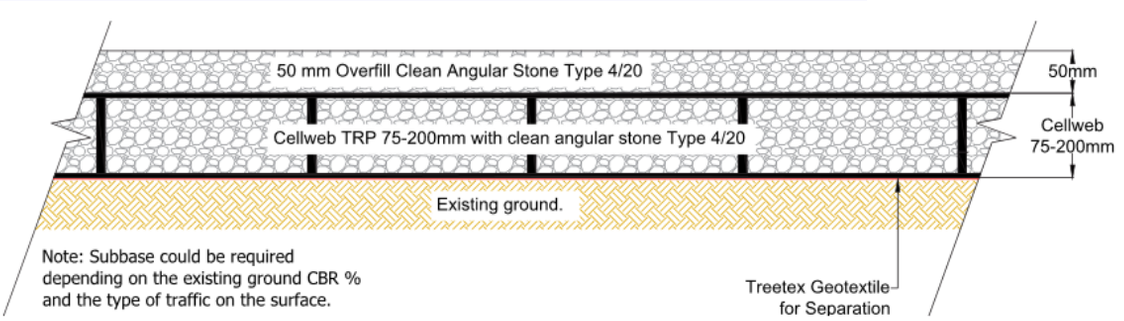
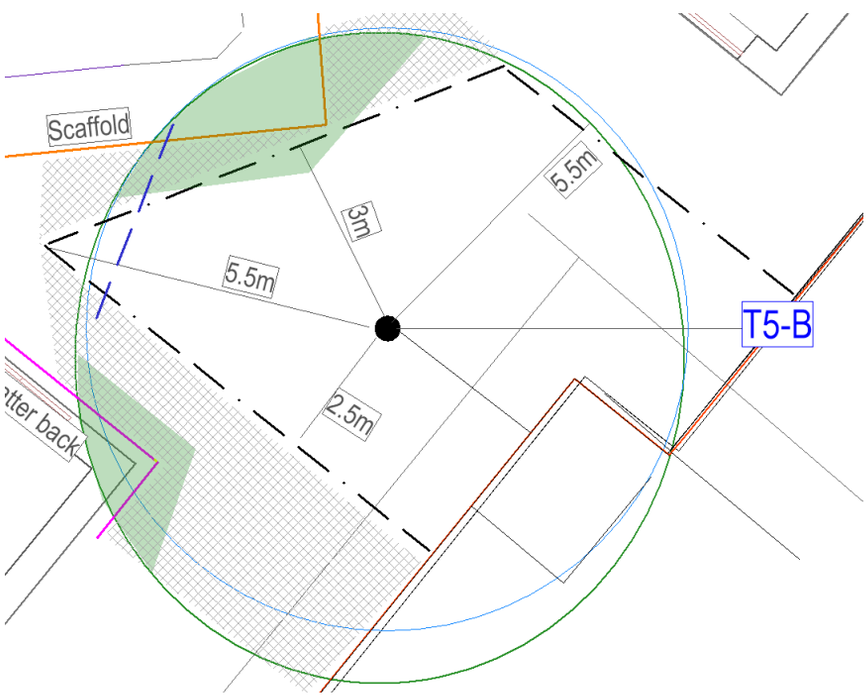


Image 2 - http://www.geosyn.co.uk/product/cellweb-tree-root-protection.

5.3.3 The drainage, water and electric ducts will be installed by ducts resting at ground level. The units will be craned in over the trees under arboricultural supervision during their installation and removal. It is likely that at the end of the project, the trees will require re-pollarding as part of their regular cycle. If this is the case, a Tree Works application will be made and the works (subject to consent), carried out prior to removal of the units (see recommendation 7.9). The space around the temporary hard standing will be protected by tree protection fencing.

5.3.4 The cherry tree T5 is protected by tree protection fencing which was sufficient for demolition. This will be adjusted to provide sufficient room for construction, with ground protection, shown by grey hatching on the plan extract below, providing protection for soil and roots during construction. The ground protection will be either cellular confinement system or another method at appendix 3.



Plan 3 – extract from SHA 1741 TPP2 A. do not scale, north is vertical.

5.3.5 The tree protection fencing is to be erected in the locations shown on the tree protection plans (appendix 2) by a thick black dashed line and to a specification found at appendix 3. The fencing is to be erected before any machinery enters site and be regarded as sacrosanct, and, once installed will not be removed or altered without prior recommendation by the project arboriculturist and where necessary approval from the local planning authority. It will be inspected post completion, and from then on every 8 weeks, either in person by the arboricultural consultant if coinciding with another requirement for inspection, or by receipt of emailed photographs.

5.3.6 Ground protection, the existing tarmac will remain in place during construction to continue to protect the soil structure and roots space below the sub base. The engineer is to determine the loading capacity of the existing surface to the requirements for additional support during construction to prevent soil deformation. If it is not strong enough, metal road plates or proprietary ground protection to be used over the tarmac to achieve loading. The hard surfacing should then only be removed before the external works phase.

5.4 Foundation installation with piling mat

5.4.1 *T9 – T13*: The area to which this applies is shown on the plan *SHA 1741 TPP2 A* by a thick yellow line.

Photo 5 taken December 2022 looking towards the tree.

- Mark the area where the method statement applies with spray paint. If the line of excavation for demolition is the same as the piling mat, then there need not be any further action. However, as this line was the removed building (which is the same footprint as the approved building), the piling mat is likely to be an additional 600mm towards the trees.
- Under **arboricultural supervision** skim off the soft surface/remove hard surface (retaining the subbase) using a small smooth bucket using a small smooth bucket. Remove the turf/surfacing from the root protection area. The depth of the excavation will be determined by the piling contractor, but will be discussed with the arboriculturist to ensure that the depth and width is minimised. A spade/smooth

bucket digger will continue until the shallowest root with a diameter greater than 25mm, or a matt of fine fibrous tree roots, are encountered.

- The roots will be pruned cleanly with bypass secateurs by the arboricultural consultant.
- The trench will be dug down to the minimum and all roots within this depth will be pruned.
- A record will be made of the number, location, diameter and depth of the roots.
- The tree side edge of the trench will be faced with a double vertical wall of damp hessian, pegged in place with pins. This is to prevent desiccation of the roots and act as a soft barrier.
- An impermeable plastic sheet will be placed next to the hessian and pegged at the top to keep in place. This is to prevent the alkalinity of the crush forming the piling mat from leaching through the hessian onto the cut roots.
- A temporary orange mesh fence to be installed along the edge of the piling mat to prevent the mat from spilling onto the area for ground protection.
- The piling mat crush to be installed in the normal way.

The clayboard/polystyrene anti-heave measures will prevent the poured concrete from touching the soil. Works will be carried out under arboricultural supervision.

5.4.2 *T1 lime:* No special measures are required for the installation of the sheet piling near T1 lime (see paragraph 3.4).

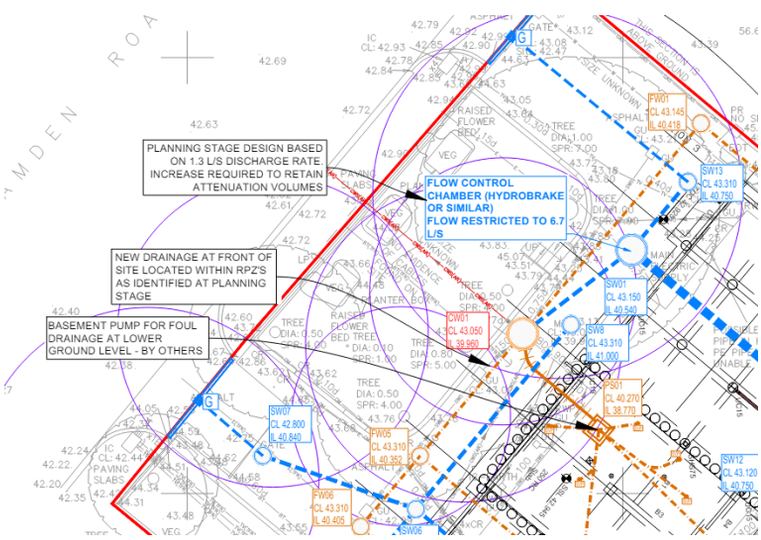
5.4.3 *T5 cherry:* There is a minor incursion into the RPA of this tree as shown by the thick pink line on the plan *SHA 1741 TPP2 A* (extract on plan 2 on page 13). This will be sheet piled, following crown pruning, and there will be no battering back towards the tree.

5.5 Installation of services

5.5.1 The services plan (CAM-PEF-ZZ-XX-DR-C-0550 P02 Proposed Drainage Layout) has been reviewed and is included at appendix 2. There are existing services and drainage routes on this site, which are largely being accessed for re-use/repair on the same roots. The plan at appendix 2 shows the existing/historic services and drainage on the plan relative to root protection areas. As expected, there is a history of complex underground services from Camden Road into the site, within the theoretical root protection areas. This will have influenced root spread and depth. The Geotechnical Report includes a trial pit TP102 next to the retaining wall with the

four London planes which found some organic material. No other relevant information is recorded.

5.5.2 It is understood that the excavation required is deep (c.2m to be confirmed). This means that in order to work safely, the route may need to be sheet piled, as the usual preferred method of hand digging or creating a number of broken trenches, recommended in National Joint Utilities Council Volume 4, would not be safe to operate due to the depth. The alternative of underground moling/trenchless excavation, is unlikely to be feasible given the number of existing services and the practical difficulty of joining an existing route. This part of the report is iterative based on finessing the layout to maximise distance between trees and routes where possible. The line of sheet piling will be reviewed by the Arboricultural consultant and reported to the Arboricultural Officer by way of a site supervision note.



Plan 4 – extract from CAM-PEF-ZZ-XX-DR-C-0550 P02 Proposed Drainage Layout. Do not scale, north is vertical.

5.5.3 The substation construction depth is understood to be no more than 500mm deep, which is highly probable to the depth of the wall's foundations and therefore have no new arboricultural impact. As a precaution, the excavation of its foundations will be lined with impermeable plastic sheeting to prevent the alkalinity of concrete from scorching roots and the digging will be supervised. Any roots found will be pruned neatly by bypass secateurs and their number, size and location recorded.

5.5.4 If the services and drainage are shallower, the following approaches will be used:

Broken Trench

from http://streetworks.org.uk/wp-content/uploads/V4-Trees-Issue-2-16-11-2007.pdf

'This technique combines hand dug trench sections with trenchless techniques if excavation is unavoidable. Excavation should be limited to where there is clear

access around and below the roots. The trench is excavated by hand with precautions taken as for continuous trenching as in (c) below. Open sections of the trench should only be long enough to allow access for linking to the next section. The length of sections will be determined by local conditions, especially soil texture and cohesiveness, as well as the practical needs for access. In all cases the open sections should be kept as short as possible and outside of the Prohibited Zone'.

Trenchless http://streetworks.org.uk/wp-content/uploads/V4-Trees-Issue-2-16-11-2007.pdf

'Wherever possible trenchless techniques should be used. The launch and reception pits should be located outside the Prohibited or Precautionary Zones. In order to avoid damage to roots by percussive boring techniques it is recommended that the depth of run should be below 600mm. Techniques involving external lubrication of the equipment with materials other than water (e.g. oil, bentonite, etc.) must not be used when working within the Prohibited Zone. Lubricating materials other than water may be used within the Precautionary Zone following consultation and by agreement.'

An example is found here: https://www.chilternmains.co.uk/directional-drilling/

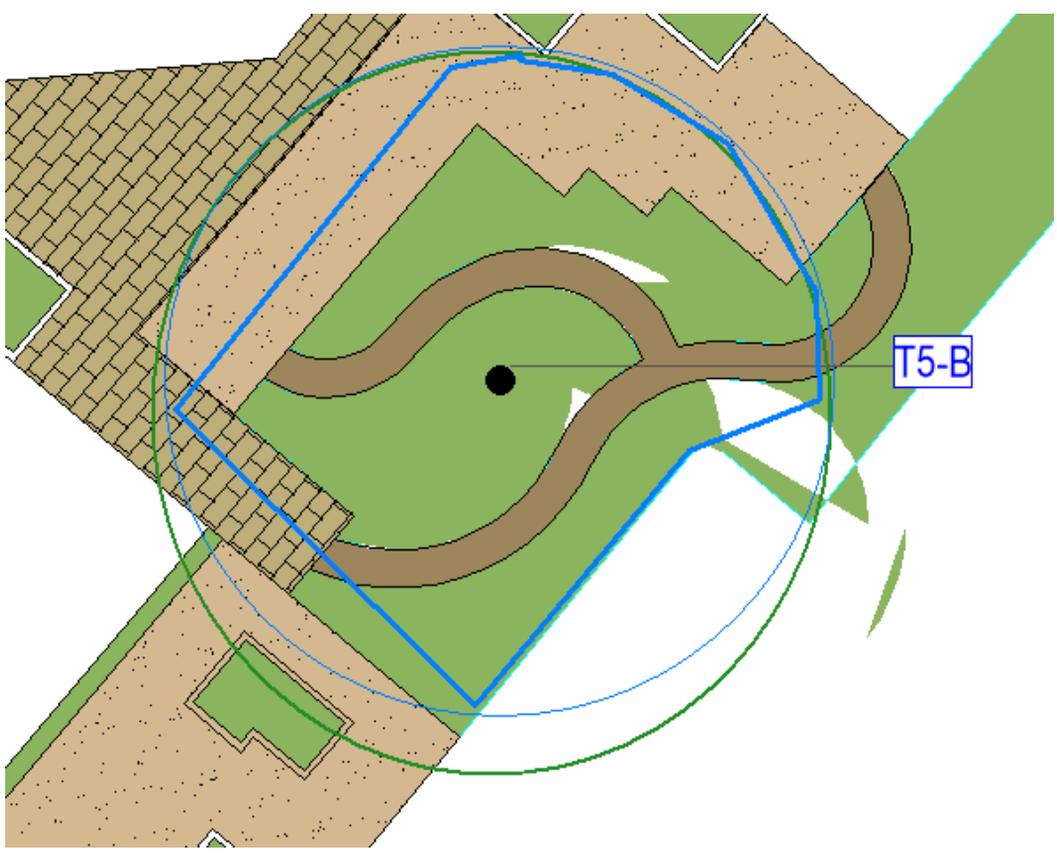
5.6 Removal of hard surfacing within the root protection areas

The hard surfacing will remain in place during works and lifted at the external works stage.
The following method statement will be observed:
Lift the tarmac using handheld tarmac spade or a digger pulling backwards to lift the hard surfacing whilst keeping the ground underneath intact. In my experience, using a smooth bucket digger carefully can lift large slabs relatively easily without disrupting the ground beneath. There may be a sheath of fine feeder roots and main structural roots beneath the concrete. Great care must be taken to avoid scuffing and damaging these roots. Once removed, the exposed soil must be immediately covered with a suitable backfill medium such as good quality top soil. The works should not take place in frosty or hot sunny dry weather as this can harm fine roots. If roots are accidentally damaged, then the arboricultural consultant must be contacted immediately.

5.7 Installation of hard surfacing within the root protection areas

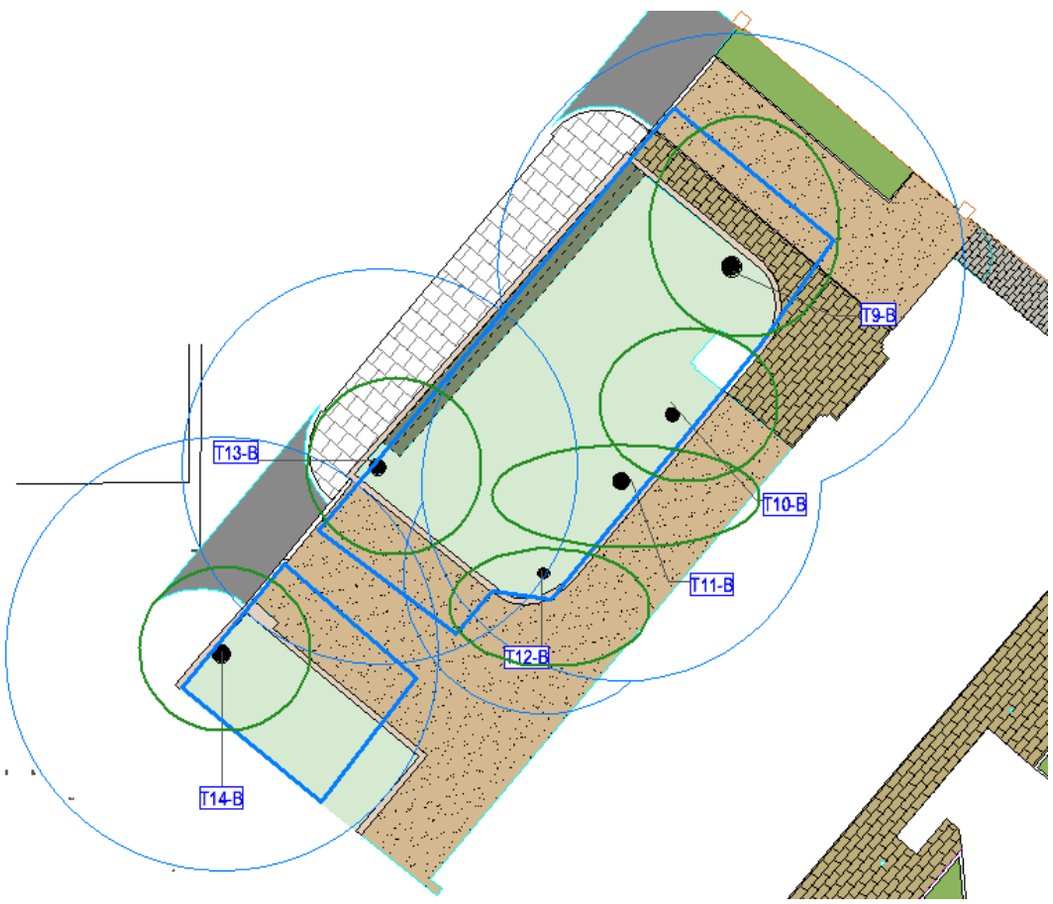
5.7.1 The areas to which this method statement applies are shown by the thick blue line on the plan SHA 1741 TPP3 A at appendix 2.

5.7.2 *T5 Cherry tree:* The previous approved scheme presented difficulties in installation and maintenance of paving under the tree. Cherry trees have large surface roots and the previous scheme and any hard surfacing/paths should be flexible to prevent cracking of rigid surfaces or lifting of slabs. The new scheme is for a bark chipping path, shown brown on the plan, in a naturalist glade style planting. This will be edged with timber, and be constructed above ground level after the lawn has been lifted by using a spade, cutting under the turf. Timber edging will be pegged in the ground and the path laid to woodchip which will need to be topped up annually. The exact configuration of the path may alter, but the principle will be followed.



Plan 5 – extract from SHA 1741 TPP3 A. do not scale, north is vertical.

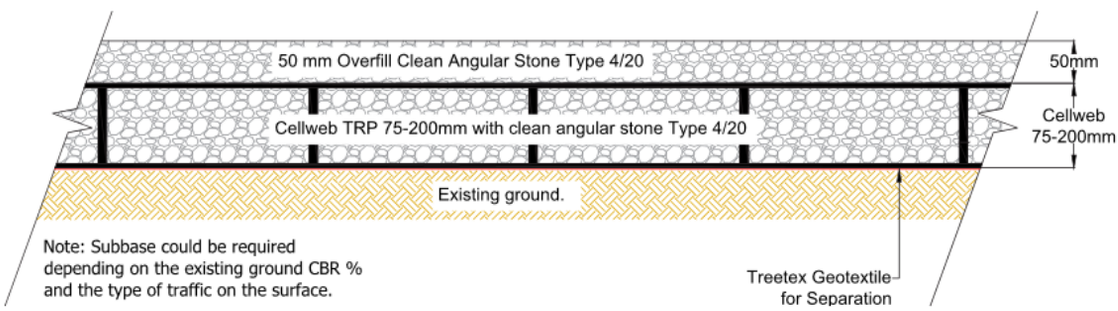
5.7.3 The hard standing shown by brown speckled surfacing will be a self-binding gravel laid on a cellular confinement system with a minimal dig construction, and edged with timber. The cross section for this will be submitted with the Landscape Architects plans. The hard standing near the frontage trees need not be minimal dig and the tarmac and subbase will be removed, and the depth of the construction of the new surface is likely to match the depth of the removed surface.



Plan 6 – extract from SHA 1741 TPP3 A. do not scale, north is vertical.

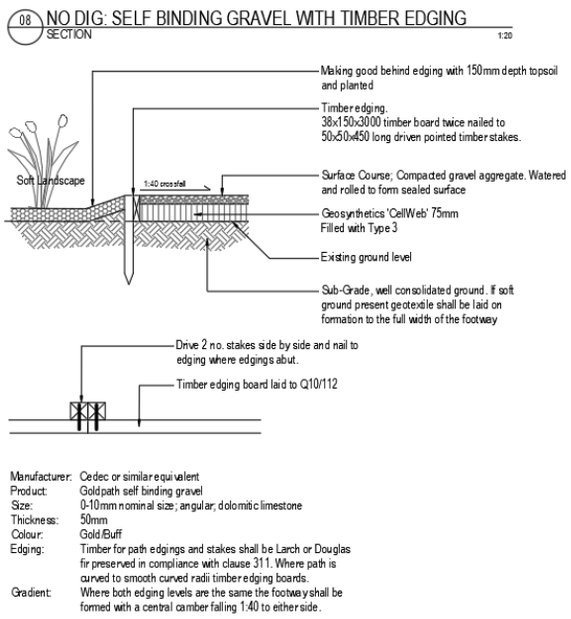
5.7.4 General recommendations: All hard surfacing near trees to be retained will be porous. The purpose of the method statement is to ensure that tree roots are retained and that they can function. Therefore, digging down, compacting the soil and creating an impermeable surface will be prevented. A method to spread and support the load of the hard surface and anticipated usage without causing compaction of the soil structure beneath will be used. The sub-base will be porous to enable gaseous exchange and water infiltration. A suitable material is washed angular stone with a diameter between 20 – 40mm with no fines. Aggregates or stones must have a near neutral PH. The surface material will be permeable paving. The exact specification of the hard surface is a matter for the engineer and architect, however the principles are as follows overleaf:

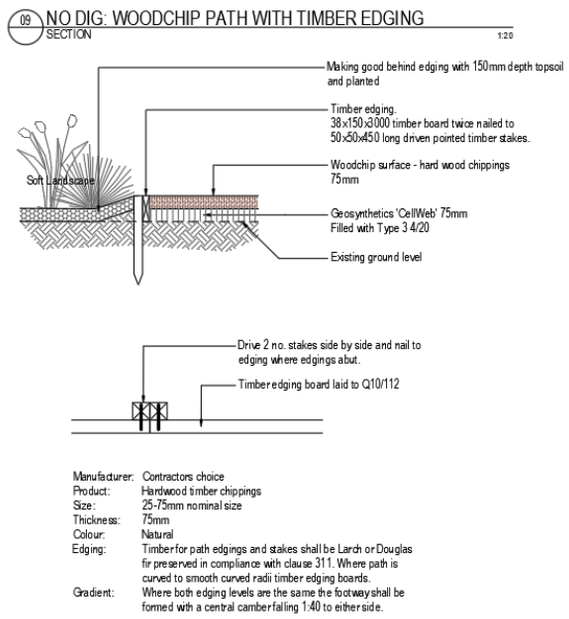
- Immediately after an even soil grading has been achieved, a geo textile membrane will be laid flat on the surface. The use of a geotextile membrane (such as Tree Tex T300) will help support the sub-base and be a partial filter (a last line of defense) for contaminants such as oil and road salt. This works by laterally diffusing the contaminants over a wider surface area so that the effect is minimized.
- Lay a cellular confinement system such as http://www.geosyn.co.uk/product/cellweb-tree-root-protection – cross section below. Install as per the manufacturers specification and to the engineers prescribed depth. Typically, this is likely to be 100 - 150mm deep. An installation method is found at https://www.geosyn.co.uk/wp-content/uploads/2016/05/Installation-Guide-Cellweb-Installation-Guide-81-3.pdf.



- A second geotextile layer to be added
- Surface to be laid in the normal way
- The edge treatment within the areas within the blue thick line will comprise treated timber laid on end pegged every 500mm with a wooden peg on the outside. The top of the peg will be flush with the top of the board. A small amount of topsoil will grade down from the top of the board to the soil to prevent a trip hazard.

The following cross section is from the landscape architect





5.8 Installation of soft landscaping

Within the root protection areas of trees to be retained, the preparation of soil for planting and turfing will be carried out by hand Cultivation will be kept to a minimum and new topsoil must not exceed 100mm in depth, with no increase within 300mm of the stem. Top soil and other materials will be transported by wheelbarrow on running boards when working near trees. Existing grass will be raked off to minimize the impact on tree roots. Under no circumstances can machinery be used. The use of enriched biochar to 5% of important top soil, and as a spot treatment is highly recommended to aid tree and shrub establishment, store carbon and support a healthy soil and root system in urban soils. https://www.carbongold.com/trade/professional-tree-care/. The hedge on the road frontage will comprise whip planting and the planting under the cherry will be small bulbs and plants. This will be easy to achieve without harming existing tree roots.

6.0 **Conclusions**

6.1 This report provides information in accordance with the requirements of condition 16 of consent 2020/3737/P and follows consultation with design team members for this re-submission. This re-submission provides certainty that T14 can now be retained and provides a more root friendly landscape design for the cherry tree T5.

6.2 The site will be supervised at key stages of development as detailed in the site supervision schedule at appendix 1 and reported to Camden Council.

7.0 **Recommendations**

7.1 That a copy of this report, including the site specific method statements and tree protection plans are kept on site at all times, is part of the site induction, and is sent to the relevant contractors.

7.2 That this report is an appendix to the Construction Management Plan.

7.3 That the arboricultural method statements are observed by all site personnel and supervised at key stages by the project arboricultural consultant. Short supervision reports are to be written after each inspection as a record of compliance and audit trail to the Local Authority.

7.4 That the foundation design takes into account trees to be retained, trees to be removed and trees to be planted.

7.5 That there are no ground level changes within the area shown on the plan by tree protection fencing.

7.6 That the tree protection fencing and ground is installed before machinery enters the site for construction, and remains in place until the soft landscaping stage.

7.7 That the tree works listed in this report which are required to facilitate planning consent, and/or for safety reasons are carried out irrespective of development.

7.8 That the Arboricultural Officer from Camden Council is contacted and invited to the pre-commencement meeting.

7.9 That there is a review of tree growth 16 weeks prior to the welfare and toilet blocks being removed, so that a Tree Works application can be made to re-pollard the trees are part of their management regime.

Sharon Durdant-Hollamby
FICFor FArborA BSc (Hons) Tech. Cert. (Arbor A)

Director
Sharon Hosegood Associates Ltd

Appendix 1

Site supervision schedule in detail
Handy pull out sheets – What You Need Know

1. Key personnel

Morgan Sindall will be carrying out the contract and the work will be supervised at key stages by Sharon Hosegood Associates (SHA). I am a suitably qualified chartered arboriculturist (see appendix 10), and will be carrying out the work. The tree officers will be kept informed of progress and any deviations or variations from this schedule and the method statement.

2. Arboricultural input and site supervision schedule

Stage	Activity and who is involved	Reference documents
Pre-commencement meeting	**Tool box talk** Main contractor Arboricultural consultant Arboricultural officer to be informed and invited (in accordance with 2.55 of Trees: Supplementary Planning Guidance. To check on tree protection and ground protection measures, including the installation of cell web for welfare and toilets.	This document; in particular SHA 1741 AMS TPP 2, section 5.2 - .4 and the tree surgery schedule at appendix 4. Construction and Logistics management plan
Installation of piling mat	**Tool box talk** To observe installation of piling mat near T9 – T12 – note in some cases this combines with the installation of services, in particular the drainage between T13 & T14, T9 and T5.	This document; in particular SHA 1741 AMS TPP2 A and section 5.4
New hard surfacing	**Tool box talk** To observe the removal of grass under the base of T5 and the laying of the paths and hard surfacing under this tree.	This document; in particular SHA 1741 AMS TPP3 A and section 5.7

Routine visits	These will take place every 8 weeks, coinciding with the stages above where possible. A tool box talk will be carried out to any new staff and contactors where necessary. The Arboricultural Officer will make ad hoc visits.	These may be carried out virtually where no active supervision of a specific task is required, and reported to the tree officer

3. How this will be communicated

3.1. The site office will contain the following:

- This method statement SHA 1741 AMS April 2024. The tree protection plans within the report are to be kept with other site plans.
- The handy pull out sheets '*What you need to know about trees and Site Supervision Schedule (edged turquoise)*

3.2. The availability and summarised contents of this information will be part of site induction for new personnel.

3.3. During each site supervision, the arboricultural consultant will carry out a tool box talk to the relevant personnel. This will be hand written and signed by relevant parties.

3.4. After each site supervision, a short report will be sent to Morgan Sindall for London Borough of Camden, Camden Council tree officers and the planning case officer. This creates a useful audit trail for both parties.

4. What happens when things change, and, in an emergency

If there is a deviation for practical reasons on any matter affecting trees which is not outlined in the method statement or this document, the site manager and/or project team, will contact the arboricultural consultant in the first instance, and then the tree officers will be contacted by phone, followed up by email. Works near trees will stop until the opinion of the consultant and the approval (or otherwise) by the tree officers is given. In an emergency, the site manager will contact his team, the tree officer and the consultant before taking action. The site manager will record any incidences with photographs and a contemporaneous hand written and signed note outlining:

- The date and time, The location of tree issue
- What happened, When the tree officers were contacted and their response
- When the consultant was contacted and her response

What you need to know about trees at Camden Road Hostel, 248-250 Camden Road, Camden, London NW1 9HE

Works on this site near trees are complex and non-standard. Ensure you have the following documents:

- Arboricultural Method Statement SHA 1766 AMS April 2024
- The tree protection plans in colour - SHA 1766 TPP2 A and SHA 1766 TPP3 A

The site will be monitored at key stages identified overleaf and at 8 week intervals (coinciding visits where possible or remotely where there is no change to activity near trees).

Key areas of concerns

- Installation of piling mat/foundations near trees to be supervised
- Installation of sewers near T14 and T9 and drainage near T5
- Removal of hard surfacing to be supervised
- Installation of surfacing to be supervised.

The tree protection and ground protection must be installed prior to demolition and be braced and signed. It must not be breached during the project. Any deviation from the method statement could lead to a breach of planning condition.

If in doubt phone (we are here to help):

Sharon Durdant-Hollamby at SHA 07943 853 525 or 01245 210420

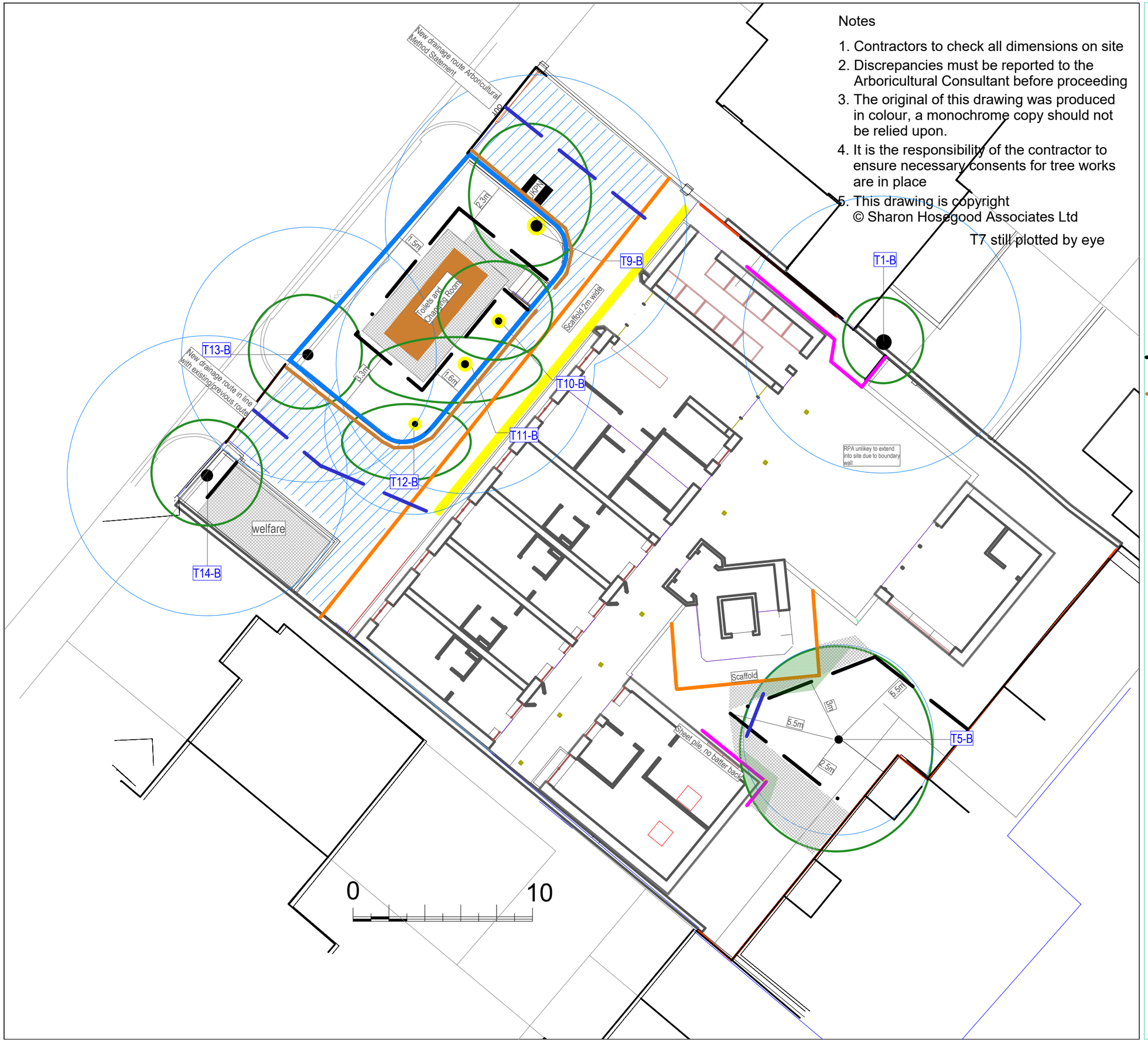
sharon@sharonhosegoodassociates.co.uk

Appendix 2

Tree protection plan SHA 1741 AMS TPP2 A for construction

Site logistics plan S01_Camden Hostels_Chester Road_Site logistic Plan Option 1
CAM-PEF-ZZ-XX-DR-C-0550 P02 Proposed Drainage Layout

Tree protection plan SHA 1741 AMS TPP3 A for external works



Notes

1. Contractors to check all dimensions on site
2. Discrepancies must be reported to the Arboricultural Consultant before proceeding
3. The original of this drawing was produced in colour, a monochrome copy should not be relied upon.
4. It is the responsibility of the contractor to ensure necessary consents for tree works are in place
5. This drawing is copyright © Sharon Hosegood Associates Ltd

T7 still plotted by eye

T1-B Category B - moderate quality and value

T1-C Category C - low quality and value

T1-U Category U - unsuitable for retention

Trees to be retained

Area to prune back the cherry tree - refer to tree surgery schedule in report

RPA - root protection area as defined by Table 2 BS 5837:2012

Walls foundation acting as a root barrier to the depth of its foundation. Roots are likely to be growing below and beyond the walls.

Tree protection fencing comprising braced Heras panels

3m heavy duty marine plyboard hoarding on outside of wall, supported by struts and stillages. In place.

Arboricultural Method Statement for foundation/piling mat installation

Heavy duty ground protection to manage loading from construction vehicles and crane. Refer to report.

Ground protection under toilet block and welfare - 100mm cell web

Sheet piling

Scaffolding

Rev	Description	Authorized
A	updated survey	SMD-H 23.04.2024

Sharon Hosegood Associates

t: 01245 210420
www.sharonhosegoodassociates.co.uk

Client

London Borough of Camden

Site Address

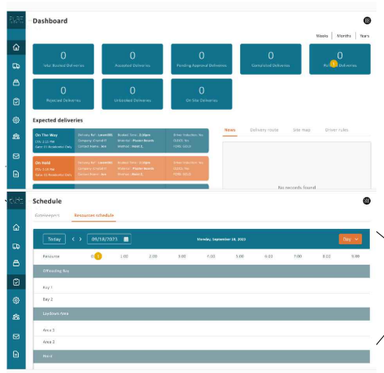
Camden Road Hostel
248-250 Camden Road, London NW1 9HE

Drawing Title	Orientation	Drawn	Authorized
Tree Protection Plan - Construction		SMD-H	SMD-H

Date	Drawing Number	Scale	Drawing Status
21.12.23	SHA 1741 TPP2	1:200@A3	For Issue

Revision

A



CAMDEN ROAD

TURTLE BARRIER

VEHICLE LOADING BAY

UKPN

BRIDGED SCAFFOLD AT FIRST FLOOR

TOILETS AND CHANGING ROOM 6.1Mx2.4M

SCAFFOLD LOADING BAY

SCAFFOLD STAIRCASE

OFFICE AND CANTEEN

MATERIAL HOLDING PEN

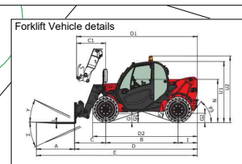
TC 35M

35000

LIFT CORE SCAFFOLD

FIRST FLOOR BALCONY LINE

Forklift Vehicle details

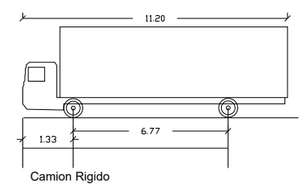


MT 625 H

Length of Forks (A)	1.20m
Wheelbase (B)	2.30m
Front wheel centre to rear face (C)	0.99m
Overall length to carriage (D)	3.90m
Overall length (E)	5.09m
Inside tyre width (F)	1.49m
Ground clearance (G1)	0.33m
Width of forks (K)	1.01m
Thickness of Forks (L)	0.45m
Overall height (U1)	1.92m
Overall height with light (U2)	2.05m
Overall width (W)	1.81m
Turning radius	3.31m
Lifting Time	8.0secs

Traffic Management

Vehicle Details



Camion Rigido

Overall Length	11.20M
Overall Width	2.59M
Overall Body Height	3.61M
Min Body Ground Clearance	0.40M
Max Track Width	2.49M
Lock-to-lock Time	6.00S
Curb to Curb Turning Radius	11.17M

KEY NOTES:

DRAFT

Legend

- Site boundary
- Scaffold
- Lift core scaffold
- Hoist
- Turnstile
- Pedestrian walkway
- Material route
- Traffic marshall
- Haki Staircase
- Root protection for existing trees
- Proposed specimen tree
- Tress to be felled

REV:	DESCRIPTION:	BY:	DATE:

PROJECT NAME : CAMDEN ROAD

DRAWING TITLE : SITE LOGISTIC PROPOSAL

DRAWN BY : A.M.

CHECKED BY : J.M.

APPROVED BY : —

DATE : 20/03/2024

CLIENT : MORGAN SINDALL CONSTRUCTION

DESIGNED BY : PURE LOGISTICS

PROJECT NO : P05

SCALE: NTS

SHEET SIZE: A3

DRAWING NO : S01

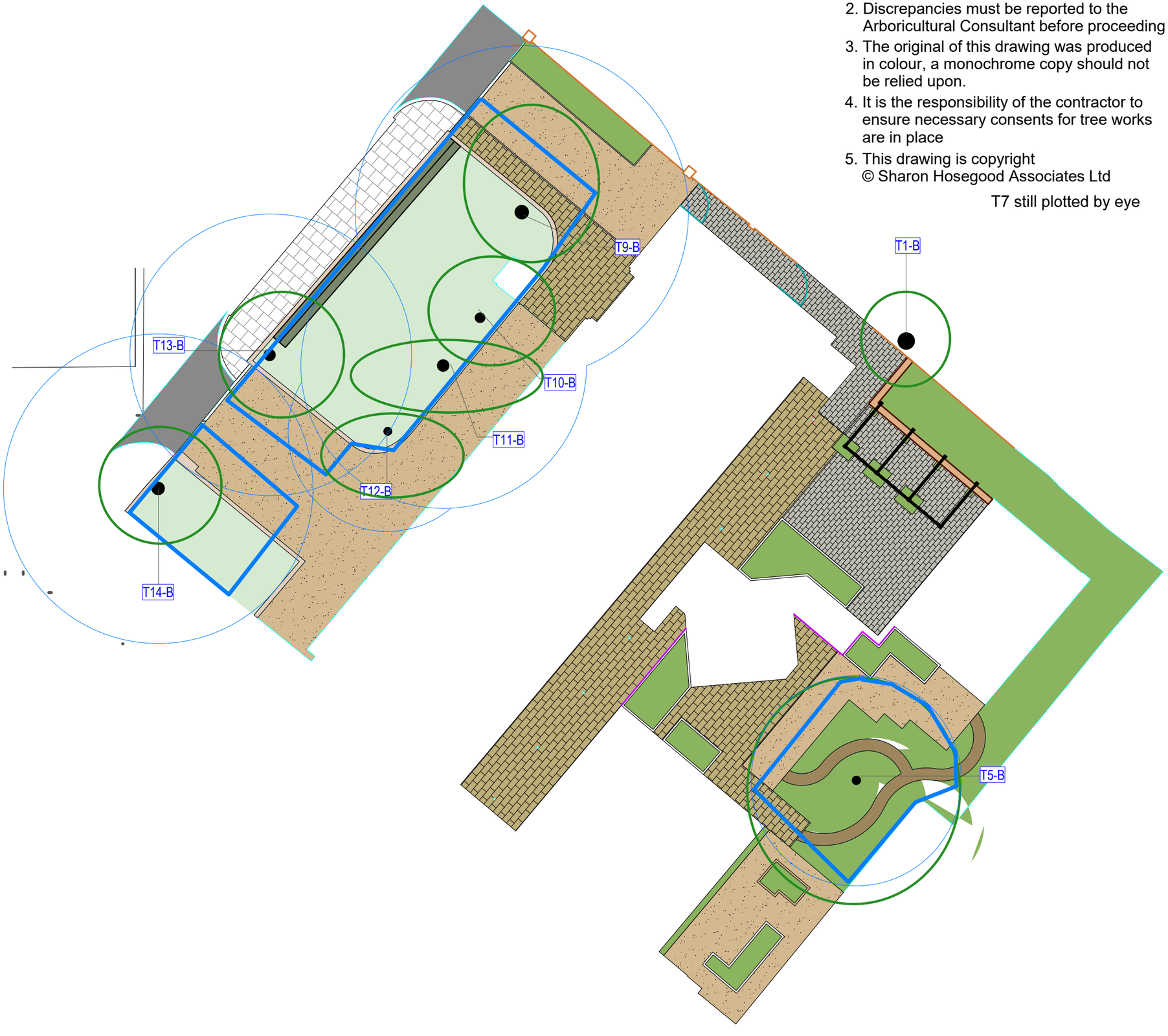
REVISION NO : R07

N W E S

Notes

1. Contractors to check all dimensions on site
2. Discrepancies must be reported to the Arboricultural Consultant before proceeding
3. The original of this drawing was produced in colour, a monochrome copy should not be relied upon.
4. It is the responsibility of the contractor to ensure necessary consents for tree works are in place
5. This drawing is copyright

T7 still plotted by eye



Trees to be retained

Area to prune back the cherry tree - refer to tree surgery schedule in report

RPA - root protection area as defined by Table 2 BS 5837:2012

Area within which Arboricultural Method Statements apply

Tobermore Fusion - Sandstone 600x300mm

Tobermore Fusion - Silver 300x200mm

Self-binding gravel CEDEC Silver Alignment may change

Shrub and herbaceous planting

Amenity grass

Natural bark chipping path Timber edging

Alignment may change

Rev : A Description : new design Authorized : SMD-H 24.04.2024

Sharon Hosegood Associates

t: 01245 210420
www.sharonhosegoodassociates.co.uk

Client

London Borough of Camden

Site Address

Camden Road Hostel
248-250 Camden Road, London NW1 9HE

Drawing Title	Orientation	Drawn	Authorized
Tree Protection Plan - Construction		SMD-H	SMD-H

Date	Drawing Number	Scale	Drawing Status
24.04.24	SHA 1018 TPP3	1:200@A3	For Issue

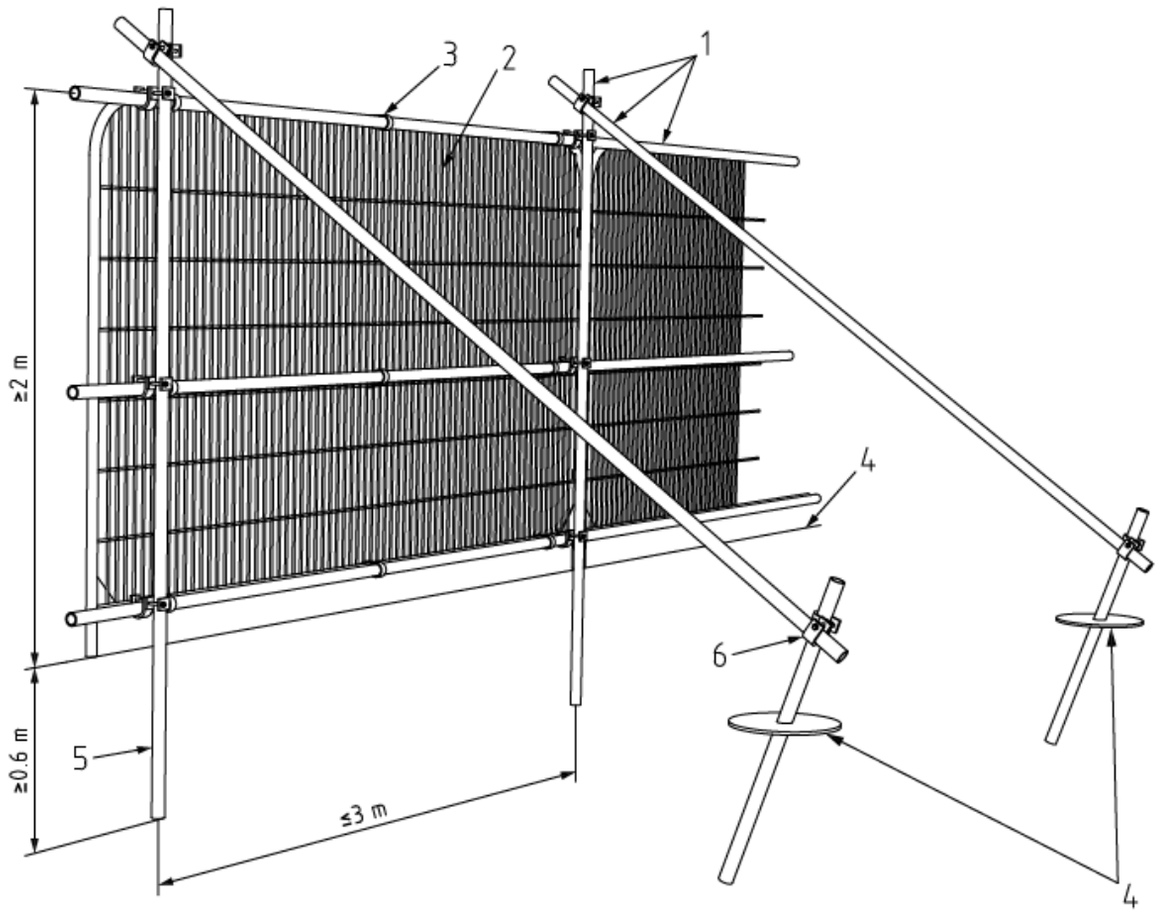
Revision

A

Appendix 3

Tree protection specification

Figure 2 **Default specification for protective barrier**



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Tree protection fencing specification from BS 5837:2012 Figure 2

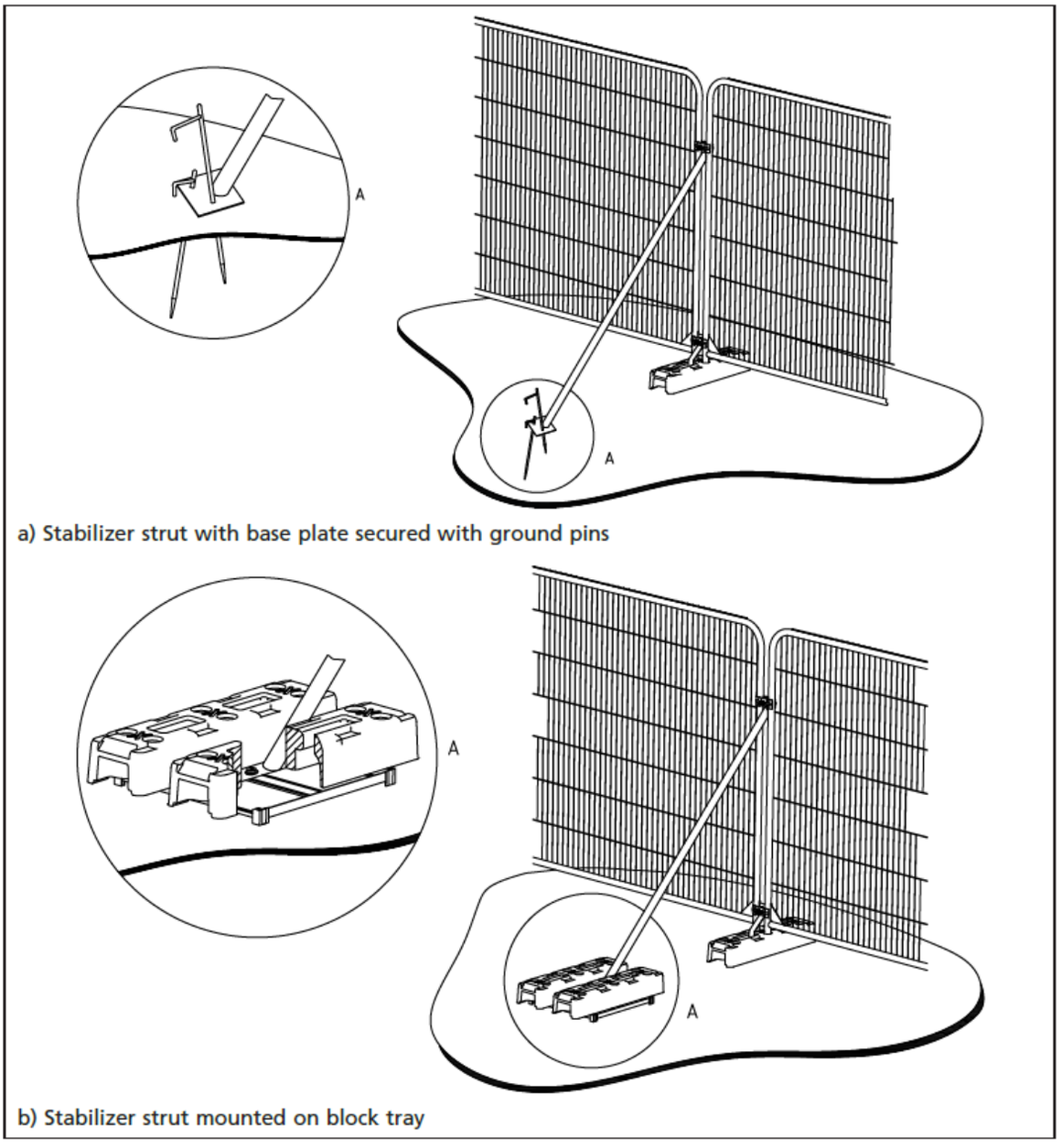
Section 6.2.2 of BS.

Barriers should be fit for purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained trees(s). Barriers should be maintained to ensure that they remain rigid and complete.

The default specification is shown above at Figure 2. Care should be taken when locating the vertical poles to avoid underground services and structural roots. Where it is not possible to drive a pole into the ground, for example on hard surfacing, figure 3 overleaf, applies.

The location for the tree protection fencing is shown on the tree protection plan delineated by a black dashed line. The location of the fencing is out the outer edge of the root protection area and the dimensions from fixed points are shown on the drawings. All weather signs should be affixed to the barriers, no more than 12m apart. This forms the construction exclusion zone.

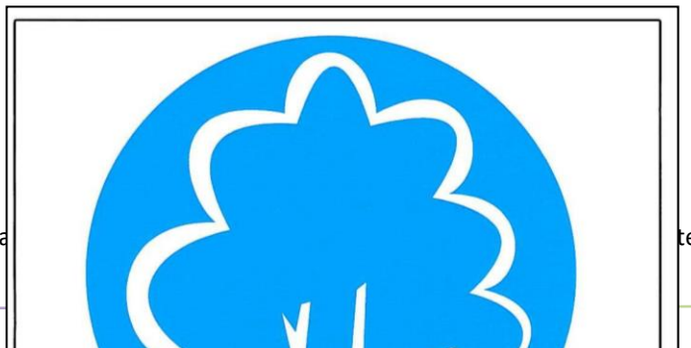
Figure 3 **Examples of above-ground stabilizing systems**



a) Stabilizer strut with base plate secured with ground pins

b) Stabilizer strut mounted on block tray

Suggested site warning sign format



Ground protection during construction

Where working space temporary access is needed within the root protection area during works, fencing should be set back the minimum amount to achieve the required room. If there is existing hard surfacing in this area, it should remain during the works as ground protection. The suitability of this surfacing for ground protection, and whether it needs to be reinforced to bear the weight of machinery, should be assessed by an engineer and discussed with an arboriculturist.

Where the set back of the fencing exposes unmade ground, the ground must be protected before any works take place on site. This is to prevent root damage and soil compaction.

The ground protection might comprise of one of the following: (section 6.2.3.3 of BS)

A) For pedestrian movements only and under the cabins, a cellular confinement system to a depth prescribed by the engineer and filled with a no fines angular stone. This cell web will be laid on a geotextile membrane after the turf has been removed by cutting spades under the turf. The reason for removal of the turf is to prevent Methanogenesis of decaying grass under the surface. https://www.geosyn.co.uk/downloads?pId=&appId=1701

B) For wheeled or tracked construction traffic exceeding 2 tonnes gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected. This should be on top of the tarmac.

The location for ground protection is shown on the tree protection plan by blue coloured hatching, identified in the key.

Appendix 4

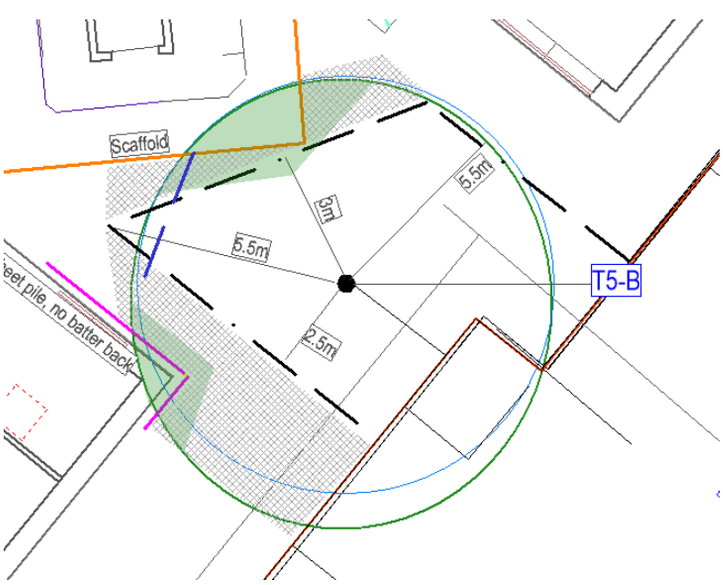
Tree Surgery Schedule

Tree surgery schedule

All works to be carried out in accordance with BS 3998:2010 'Tree works – Recommendations'. All pruning cuts to be made at suitable growing points in the line with the principles of 'Natural target pruning'. An ecological check is required by a competent person prior to tree works being carried out. Works should not take place until planning permission is granted and all pre-commencement conditions are discharged. This must be communicated to the tree surgeon and storage agreed with the contractor.

Note that all previously approved works have been implemented apart from pruning of T5. The approved Arboricultural Method Statement provided flexibility for the removal of T14 lime if the substation was required in this location. As this will now be located elsewhere, the tree will be retained.

Tree no.	BS Cat	Species	Proposed works	Reason
T5	B	Cherry	Remove any dead wood with a diameter greater than 25mm Slight crown reduction of 1 – 2m on the northern and south-western aspects, only where required to clear the building. Upper canopy to continue above. Clear shrubs around the tree No change from Approved Method Statement reference *SHA 1019 AMS Camden Rd Hostel AMS March 22*	For safety reasons To facilitate construction



Plan 5 extract from SHA 1741 TPP2 A. Do not scale, north is vertical. Green shading indicates area to be pruned.

Appendix 5

Statement of methodology and reference material

Statement of methodology

Original tree survey carried out on 12.06.2019. Approved Arboricultural Impact Assessment *SHA 1019 AIA* and approved Arboricultural Method Statement reference *SHA 1019 AMS Camden Rd Hostel AMS March 22* reviewed. The site was supervised during the demolition phase on 20/12/2022 by Sharon Durdant-Hollamby during the demolition by Goody Demolition. The site supervision report is found at appendix 10. The trees were then re-surveyed on 20/12/203 and no substantive change was found. Trees shown to be removed as part of the previously approved Arboricultural Method Statement reference *SHA 1741 AMS Camden Rd Hostel AMS March 22* have been removed.

Series of online meeting with key consultants.

Received material

Factual Geotechnical Site Investigation Report reference: 1923337 R01 (00) April 2024

Landscaping plans: 2496-TFC-XX-00-D-L-1001_S3_P01_Landscape General Arrangement. Note that there may be some slight changes to alignment of paths, but the principles will remain.

Drainage: CAM-PEF-ZZ-XX-DR-C-0550 P02 Proposed Drainage Layout

Logistics: S01_Camden Road_Site Logistic Proposal

Structural: General Arrangement Foundations reference: 123007-PEF-CA-FD-D-S-0102

Ecological Appraisal: December 2019 by Baker Consultants reference 1245_rep_ca.dox.

Reviewed documents and text

BSI. BS 3998:2010 *Tree work-Recommendations.*

BSI. BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations*

C. Mattheck 'The body language of trees' 2015

Arboricultural Association: The use of Cellular Confinement Systems near trees – Guidance Note 12

Appendix 6

Caveats & Exclusions

Specific report caveats

1. At the time of writing this report, the protected tree status is correct, however, this can change. Therefore, I advise that a further check is made with Camden Council before any works to trees takes place.
2. No internal diagnostic equipment was used other than a sounding mallet and probe and all inspections were from ground level only, with the aid of binoculars where necessary.
3. The survey is concerned solely with arboricultural issues.
4. Any changes in ground level, or excavations near to tree roots not discussed within this report may change the stability and condition of the trees and a further examination would be required.
5. As trees are a dynamic living organism this report is only valid for a period of 12 months, in respect to their health and condition.
6. Only the trees listed in this report have been examined.
7. The measure of offsite trees has been estimated, except any crown within the site overhang which is measured. Where the crown of an onsite tree overhangs the boundary, the crown spread in this direction is also estimated.
8. The base and trunk of the offsite trees could not be examined, and therefore a full assessment of the trees condition could not be made.
9. Dense ivy and undergrowth prevent a full condition survey being carried out. The vegetation may be hiding structural defects.
10. The tree information is from the time of the survey. Some pests, diseases and fungi only appear seasonally, therefore it is possible not all issues that may affect the health of the trees could be observed.

Appendix 7

Tree related legislation affecting the site

1.0 Tree preservation orders

The Town and Country Planning (Tree Preservation) (England) Regulations 2012.

Tree Preservation Order (TPO) C510 2005 affects the site (confirmed 16/03/16). This means that no work to the trees can take place (other than listed in this report) without consent from the Local Planning Authority. Applications typically take eight weeks to process. Works listed in this report do not require separate consent, provided that all the pre-commencement conditions have been discharged from a full planning approval relating to this report. The exception to this is works which are not required to facilitate planning consent. These are clearly identified within the tree surgery schedule and will need separate consent.

2.0 Conservation Area

The site is within Camden Square Conservation Area. This means that no work can take place to trees (over 75mm at 1.5m) unless 6 weeks' notice of intent to carry out work is sent to the Local Planning Authority (LPA). The LPA can either raise no objection, or if they consider that the proposed works are detrimental to the visual amenity of the area, they will serve a Tree Preservation Order. Works listed in this report do not require separate consent, provided that all the pre-commencement conditions have been discharged from a full planning approval relating to this report.

3.0 Ecological considerations

The Wildlife and Countryside Act 1981, as amended, The Conservation of Habitats and Species Regulations 2010 and the Countryside and Rights of Way Act 2000, provide statutory protection to species of flora and fauna including birds, bats and other species that are associated with trees.

4.0 Occupiers Liability Act 1957 and 1984

The Occupiers Liability Act (1957 and 1984) places a duty of care to ensure that no reasonably foreseeable harm takes place due to tree defects. Therefore, this report includes recommendations within the tree tables for work required for safety reasons. 'Common sense risk management of tree (National Tree Safety Group 2012)' states that *'The owner of the land on which a tree stands, together with any party who has control over the tree's management, owes a duty of care at Common Law to all people who might be injured by the tree. The duty of care is to take reasonable care to avoid acts or omissions that cause a reasonably foreseeable risk of injury to persons or property'.*

5.0 Common law

This enables pruning back to the boundary line providing the work is reasonable. Other restrictions, such as tree preservation orders/conservation areas still apply.

The owner of a tree is not obliged to trim their trees or hedges to prevent them from crossing over a boundary. Whilst the tree owner is not obliged to cut back the branches, the person whose property is overhung has the right to cut back the branches to the boundary providing there are no planning or legal restrictions on the trees such as Tree Protection Orders or if they are located in a church yard, in which case suitable consent must be obtained. Such pruning works must be undertaken to a suitable standard and must not cause damage to the tree.

The resulting debris remains the property of the tree owner, but you must not cause any damage to their property when returning it back to them and you do not have the right to trespass on the tree owner's property in carrying out the works. In the interests of good neighbourly relations, we would encourage neighbours to discuss their intentions with each other before carrying out such works, providing the work is reasonable and that the trees are not subject to TPO or Conservation Area protection.

6.0 Veteran Trees

"The term veteran tree is one that is not capable of precise definition but it encompasses trees defined by three guiding principles: trees of interest biologically, aesthetically or culturally because of their age; trees in the ancient stage of their life; trees that are old relative to others of the same species."*

There are no veteran trees on, or immediately adjacent to the site.

*(English Nature (200) Veteran Trees – A Guide to Good Management. [Online]. [Accessed 21st March 2019]. Available from: http://publications.naturalengland.org.uk/publication/75035)

7.0 Health and Safety:

The works will be undertaken in accordance with the following legislative requirements which are within the remit of the main contractor. SHA will adhere to site Risk Assessments and Method Statements and follow site rules. SHA will produce their own Risk Assessment and Method Statement when visiting site and observing works:

- The Health & Safety at Work Act 1974 and associated guidance

- The Management of Health and Safety at Work Regulations 1999 and Management of Health and Safety at Work ACoP (HSE
- L21)
- The Construction (Design and Management) (CDM) Regulations 2015 London Borough of Camden c/o Morgan Sindall Construction and Infrastructure Limited, Managing Health and Safety in Construction (HSE L144)
- and Health and Safety in construction (HS(G)
- The Work at Height Regulations 2005 (as amended), and Work at Height Regulations 2005 (as amended). Brief Guide
- The Environmental Protection Act 1990
- The Highways Act 1980
- The Personal Protective Equipment at Work Regulations 1992 (as amended), and Personal Protective Equipment at Work –
- Guidance (HSE L25)
- The Provision and Use of Work Equipment Regulations 1998 ad Safe Use of Work ACoP (HSE L22).

National Policy

National Planning Policy Framework December 2023

186. When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons[67] and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

The London Plan 2021

Policy G7 Trees and woodlands

A London's urban forest and woodlands should be protected and maintained, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London's urban forest – the area of London under the canopy of trees.

B In their Development Plans, boroughs should:

1) protect 'veteran' trees and ancient woodland where these are not already part of a protected site[139]

2) identify opportunities for tree planting in strategic locations.

C Development proposals should ensure that, wherever possible, existing trees of value are retained.[140] If planning permission is granted that necessitates the removal of trees there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT or another appropriate valuation system. The planting of additional trees should generally be included in new developments – particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy.

139 Forestry Commission/Natural England (2018): Ancient woodland and veteran trees; protecting them from development, https://www.gov.uk/guidance/planning-applications-affecting-trees-and-woodland

140 Category A, B and lesser category trees where these are considered by the local planning authority to be of importance to amenity and biodiversity, as defined by BS 5837:2012

Camden Local Plan 2017

Policy A3 Biodiversity

Trees and vegetation

The Council will protect, and seek to secure additional, trees and vegetation. We will:

j. resist the loss of trees and vegetation of significant amenity, historic, cultural or ecological value including proposals which may threaten the continued wellbeing of such trees and vegetation;

k. require trees and vegetation which are to be retained to be satisfactorily protected during the demolition and construction phase of development in line with BS5837:2012 'Trees in relation to Design, Demolition and Construction' and positively integrated as part of the site layout;

l. expect replacement trees or vegetation to be provided where the loss of significant trees or vegetation or harm to the wellbeing of these trees and vegetation has been justified in the context of the proposed development;

m. expect developments to incorporate additional trees and vegetation wherever possible.

Camden Planning Guidance

Trees Supplementary Planning Guidance

March 2019. Relevant highlights below

2. How the Council will protect trees

2.1 The Town and Country Planning Act 1990 places an express duty on local planning authorities to ensure whenever appropriate when granting planning permission that adequate conditions are imposed to secure the preservation or planting of trees (Section 197), and that any necessary tree preservation orders are made (Section 198).

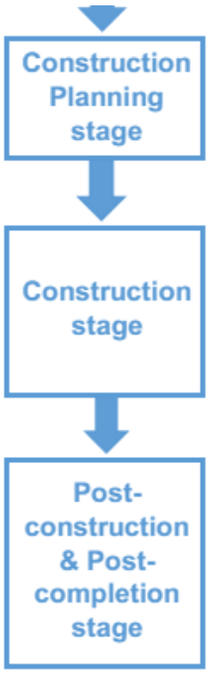
2.2 Given the importance of trees and vegetation to the borough, the Council will require sufficient information from applicants to demonstrate that tree and canopy coverage has been considered.

> **CANOPY COVER**
>
> The layer of leaves, branches and stems of trees that cover the ground when viewed from above.

2.3 This chapter explains how to protect trees and vegetation by undertaking site and constraints assessments and developing tree protection and arboricultural methodologies appropriate to the site and its context. It provides advice on the delivery and maintenance of landscapes that offer an attractive, safe, accessible, healthy, sustainable and ecologically diverse environment.

2.4 Contractors working in proximity to trees are required to fully abide by BS 5837: 2012 (or as updated) "Trees in relation to design, demolition and construction – Recommendations". Those working directly on trees should follow BS 3998: 2010 (or as updated) "Tree Works - Recommendations" which deals with the standards of workmanship.

2.5 Applicants should ensure that when they are commissioning construction works and the maintenance of trees that tenders/specifications are explicit on the qualification levels of contractors, particularly for an arboriculture professional qualification. Lists of arboricultural consultants can be found at: www.trees.org.uk; the Institute of Chartered Foresters and www.consultingarboristssociety.co.uk.



- Arboricultural methodologies and supervisory arrangements set out in the Arboricultural Method Statement (AMS) and Construction Management Plan (CMP) are implemented. The CMP must support the tree protection details.

- Preventing damage to trees and vegetation to be retained.
- Monitor the tree protection measures and submit details of monitoring when required, and where this has been requested by the Council.
- Ensure the demolition and construction works do not result in harm to retained trees.

- Inspection of trees and surrounding environment.
- All new trees are to be planted and maintained in accordance with approved plans (i.e. the approved landscape scheme or planting plan) and in line with BS8545:2014 "Trees: from nursery to independence in the landscape".
- Management and maintenance report for a minimum of 10 years to ensure successful tree establishment.

Arboricultural Method Statement, including Tree Protection Plan

2.51 On sites where trees are to be retained, an Arboricultural Method Statement (AMS), including a Tree Protection Plan, should be submitted to the Council for approval. This will ensure that foreseeable risks are identified and that suitable protection is provided for the crown, trunk and roots of trees (and on neighbouring land) throughout the development scheme (including demolition and clearance works). It is a particularly common requirement on congested development sites where working/storage space is likely to be limited.

2.52 It is essential that suitable techniques are followed to ensure there is no damage from the demolition and construction process. Consideration should also be given to how the soil can be protected, as well as the roots. A variety of potential risks to tree health can arise from construction work. This includes ground excavations, or sustained movements from walking and movement of machinery leading to soil compaction, preventing the absorption of water and creating anaerobic conditions. Tree failure can

also occur where root protection areas and buffer zones are not properly managed and maintained. For example, spills and leaching can be toxic to trees and rising soil levels can suffocate roots. A robust supervisory and communications framework for site contractors must be in place to ensure that the risks to planting are minimised.

2.53 The Tree Protection Plan and Method Statement must be prepared by a qualified arboriculturalist across the various phases of the development. Applicants must demonstrate to the Council's satisfaction that suitable tree protection measures will be place prior to any works commencing on-site.

2.54 The precise content of the Tree Protection Plan and Arboricultural Method Statement will depend on the requirements of each individual planning application; however, it should be prepared in line with BS:5837:2012. Key considerations are set out below.

The Tree Protection Plan should show:

- Retained trees against the finalised site layout;
- Location of Root Protection Areas (RPAs);
- Operations/ construction within RPAs;
- Details of protective fencing / barriers and any construction exclusion zones / areas designated for storage/mixing of materials and welfare facilities;
- Mitigation tree planting (as shown in the landscaping scheme);
- Any other relevant location-based tree information.

The Arboricultural Method Statement will guide the relevant operations on the site and should include:

- Supporting information for the Tree Protection Plan and rationale for the proposals;
- Schedule of all arboricultural works to facilitate construction/demolition activities, including pruning and moving, and their timing/phasing in connection with the development;
- Relevant construction and demolition details and methods of tree protection for each stage of the works, within Root Protection Areas and buffer zones. This includes the construction of ancillary structures (e.g. bin stores), provision of site accommodation, location of storage areas and cement mixing, removal and replacement of surfacing; arrangements for the disposal of materials, specification and installation of temporary and permanent access, the positioning of heights and arcs of cranes and space needed for piling rigs and excavation and utility/service runs;
- Supervisory and communications framework for all parties working on-site; i.e. how works will be supervised throughout the demolition/construction and identification of the key personnel that will be involved in the project: names and contact details.
- How relevant parties will be made aware of the protection measures, including local residents and community groups;
- Monitoring arrangements.

2.55 The Method Statement should be developed in liaison with the Council and developers must notify the Council's Tree Officer prior to the commencement of any works onsite, including demolition. All tree protection measures are to be installed in line with the approved tree protection details prior to commencement to prevent excavations, the storage of materials, deposition of waste, compaction etc.. These measures, e.g.

fences, should be properly maintained throughout the construction process. Where tree protection measures are not properly maintained, the Council may use a stop notice to prevent the development from continuing.

2.56 Site huts, scaffolding and cranes, temporary site structures and any other buildings and structures to be located on site during the construction phase should not interfere with trees, including their canopies and root system, and vegetation to be retained. Materials should be carefully stored and disposed of to avoid harm to the wellbeing of trees and vegetation.

2.57 The Council's Tree Officer will inspect the measures that have been put in place to protect trees. Ad-hoc visits will be made throughout the demolition/construction phase to check that tree protection measures are still in place.

2.58 No tree protection measures should be removed during the construction programme unless the Council's Tree Officer or a qualified arboriculturalist employed by the developer has inspected the site.

Appendix 8

Glossary

Access facilitation pruning	One-off tree pruning operation, the nature and effects of which are without significant adverse impact on tree physiology or amenity value, which is directly necessary for operations on site.
Anchorage	In trees, the holding of the root system within the soil, involving the flow of forces from the stem through the branches of the roots system to the cohesive root/soil interface.
Arboriculture	Formerly all aspects of the culture of trees, especially for forestry. Latterly, the art and science of cultivating and managing trees as groups and individuals, primarily for amenity and other non-forestry purpose.
Arboricultural method statement	Methodology for the implementation of any aspect of development that is within the root protection area, or has the potential to result in loss of or damage to a tree to be retained.
Arboriculturist	Person who has, through relevant education, training and experience in the field of trees in relation to construction.
Architecture	In a tree, a term describing the pattern of branching of the crown or root system.
Backfill medium	Material used for refilling an excavated planting hole.
Bark	A term usually applied to all the tissues of a woody plant lying outside the vascular cambium, thus including the phloem, cortex and periderm.
Biochar	The following is taken from http://www.carbongold.com/wp-content/uploads/2016/12/CG-Soil-Improver-info-sheet-1.pdf 'Biochar is highly porous and provides a permanent infrastructure for the colonization of beneficial micro-organisms. Biochar also alters the physical nature of soil to increase the water holding capacity and higher nutrient retention, reducing leaching an irrigation requirement. Other benefits to soil health include reductions in acidity, improvements of the cation exchange capacity; and efficiency of fertilisers – all of which cause an increase in plant productivity. Enriched Biochar Soil Improver contains biochar blended with multiple strains of mycorrhizal fungi and antagonistic trichoderma, along with actinomyces bacteria from wormcasts and trace minerals from seaweed. Apply to sterile, over-worked soils and substrates to improve soil fertility and reduce chemical inputs. (Carbn Gold website).' **Shaffert and Percival: Influence of Biochar, Slow-Release Molasses's and an organic N:P:K fertiliser** **Arboriculture and Urban Forestry 2016.42(2): 102-110**

Biodiversity	The variability among all living organisms of an ecological complex.
Biomechanical	Pertaining to the mechanical functions and properties of living organisms, such as trees.
Body language	In trees, the outward display of growth responses and/or deformation in response to mechanical stresses.
Branch	A limb extending from the main stem or parent branch of a tree.
Branch bark ridge	The raised arc of bark tissues that forms the acute angle between a branch and its parent stem
Branch collar	The swelling or roughened bark often found at the base of a branch which should be left intact if the branch is to be pruned off.
Brown-rot	A type of wood decay in which cellulose is degraded, while lignin is only modified.
Canopy	The topmost layer of twigs and foliage in a tree.
Co-dominant	In trees, a similarity between two or more stems or branches with regard to their size and their position within the canopy.
Column	In the wood or phloem of a tree, an axially elongated zone of tissue that is distinguished form the surrounding tissue; e.g. Live verses dead or decayed versus non-decayed.
Construction exclusion zone	An area based on the root protection area from which access is prohibited for the duration of the project.
Containerised tree	Tree grow using containerizing nursery production system.
Compartmentalise	The confinement of disease or other dysfunction within an anatomically discrete region of plant tissue, due to passive and/or active defenses operating at the boundaries of the affected region.
Crown	In arboriculture, the main foliage-bearing portion of a tree.
Crown lifting	The removal of shortening of the branches that form the lower part of the crown of a tree.
Crown reduction	Pruning in order to reduce the size of the crown of a tree.
Crown thinning	Pruning inside the crown of a tree in order to reduce its density.
Defect	In relation to tree hazards, any feature of a tree which detracts from the uniform distribution of mechanical stress, or which makes the tree mechanically unsuited to its environment.
Dessication	The state of extreme dryness, the drying out of roots.

Dieback	The death of part of a plant, usually starting from a distal point and often progressing proximally in stages.
Direct damage	Direct physical damage to a structure of surface from pressure exerted by the trunk or growing roots.
Epicormic	Pertaining to shoots or roots which are initiated on mature woody stems; shoots can form tin this way from dormant buds or they can be adventitious.
Failure	In connection with tree hazards, a partial or total fracture within woody tissues or loss of cohesion between roots and soil.
Flush cut	A pruning cut close to the parent stem which removes part of the branch bark ridge.
Foreseeable	In hazard assessment, pertaining to failure and associated injury of damage which are predictable on the basis of evidence from a tree and its surroundings.
Fungi	Organisms of several evolutionary origins, most of which are multicellular and grow as branched filamentous cells within dead organic matter or living organisms.
Hazard	A thing, a process or a potential event that has the potential to cause harm.
Included bark	Bark of adjacent parts of a tree (usually forked stems, acutely joined branches or basal flutes) which is in face-to-face contact; i.e. without a woody connection. Such a structure lacks inherent strength but is in many instances strongly reinforced by a surrounding 'shell' of wood.
Independent in the landscape	Point at which a newly planted tree is no longer reliant on excessive or abnormal management intervention in order to grow and flourish with realistic prospects of achieving its full potential contribute to the landscape.
Mulch	Material laid down over the rooting area of a tree or other plant to help conserve moisture, suppress weeds and encourage a beneficial microflora.
Mycorrhizal	Pertaining to an intimate symbiotic association between plant roots and specialised fungi.
Pathogen	A micro-organism that causes disease in another organism.
Pollard	A term for a pollarded tree
Pollarding	The complete or partial removal of the crown of a young tree so as to encourage the development of numerous branches; also, further cutting to maintaining this growth pattern.

Probability	A statistical measure of the chance that a particular event (e.g. a specific failure of a tree or specific kind of harm to persons or property) might occur.
Resistograph	The IML-RESI system is based on the measurement of drilling resistance. The IML-RESI operates in a similar manner to a normal drill. A drilling needle with a diameter of 1.5mm is inserted into the wood under constant drive. While drilling, the resistance is measured as a function of the drilling depth of the needle. The data is printed and stored electronically at a scale of 1:1 simultaneously. Although invasive the relatively small needle diameter causes very little damage, testing is normally only undertaken to confirm the remaining stem wall thickness in decaying trees.
Risks	The likelihood of the potential harm from a particular hazard becoming actual harm.
Root protection area	A layout tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. BS 5837:2012 *'Trees in relation to design, demolition and construction – Recommendations'.*
Root flare	Thickened and expanded base of s tree stem at ground level form which buttress roots form.
Rootplate	The central part of the root system of a tree, consisting of the large-diameter main roots and a dense mass of smaller roots and soil.
SULE	Safe useful life expectancy of a tree (Barrell)
Stress	In plant physiology, a condition under which one or more physiological functions are not operation within their optimum range, for example owing to lack of water, inadequate nutrition or extremes of temperature.
Stub cut	A pruning cut which is made at some length distal to the branch bark ridge.
Target pruning	The pruning of a twig or branch so that tissues recognisably belonging to the parent stem or branch are retained and not damaged.
Tree Preservation Order	In Great Britain, an order made by a local authority, whereby the authority's consent is generally required for the cutting down, topping or lopping of specified trees.
Tree protection plan	Scale drawing, informed by descriptive text where necessary, based upon the finalized proposal, showing trees for retention and illustrating the tree and landscape protection measures.

TreeRadar Inc.	This equipment is ground penetrating radar that scans the ground for objects and records the data from live roots on a field computer.
Utility	An undertaker by statute that has a legal right to provide customer services (e.g. communication, electricity, gas and water).
Vigour	In tree assessment, an overall measure of the rate of shoot production, shoot extension or diameter growth.
Vitality	In tree assessment, an overall appraisal of physiological and biomechanical processes, in which high vitality equates with near-optimal function, in which high vitality equates with healthy function.
Visual Tree Assessment (VTA)	In addition to the literal meaning, a system expounded by Matteck and Breloer (1995) to aid the diagnosis of potential defects through visual signs and the application of mechanical criteria.
Wound	Injury caused to a tree by a physical force.

Appendix 9

My Experience and Qualifications

Sharon Durdant-Hollamby

FICFor FArbor A BSc (Hons) Tech Cert Arbor A

Profile

Sharon is an Expert Witness, chartered arboriculturist and Director of Sharon Hosegood Associates Ltd. Sharon had eleven years' experience as a local government tree and landscape officer before joining a contractor as a tree consultant in 2005. In 2007 she formed an environmental practice in Essex with the owner. As managing director, she built up the ecological and arboricultural consultancy to a team of 20. She is a past President of the Institute of Chartered Foresters (May 2021 – April 2023). She joined Essex Quality Review Panel in May 2023 as an arboricultural expert.

Specialties:	Trees in relation to development, including appeals and planning hearings
	Tree root investigations, including TreeRadar
	Tree hazard evaluation
	Tree preservation orders
	Trees and well-being with community engagement
Professional bodies:	Immediate Past President of the Institute of Chartered Foresters Fellow of the Institute of Chartered Foresters (ICF) Fellow of the Arboricultural Association
Qualifications:	Cardiff University Law School Bond Solon Civil Expert Certificate Arboricultural Associations Technicians Certificate BSc (Hons) Geography and Landscape Studies Managing Safely IOSH (2017)
Awards:	Top student award for the Technician's certificate in 2005
	The Broomfield Hospital Woodland Management project she has managed between 2009 -2015 won the following awards: The Essex Biodiversity Awards (nomination) The Excellent Community Engagement Award (NHS Forest) Green Flag and Green Apple Award Highly commended for the Health Sector Journal Award 2013 Honorary College Fellow (Services to Arboriculture and Forestry) University Centre, Myerscough

Appendix 10

Site supervision report during demolition

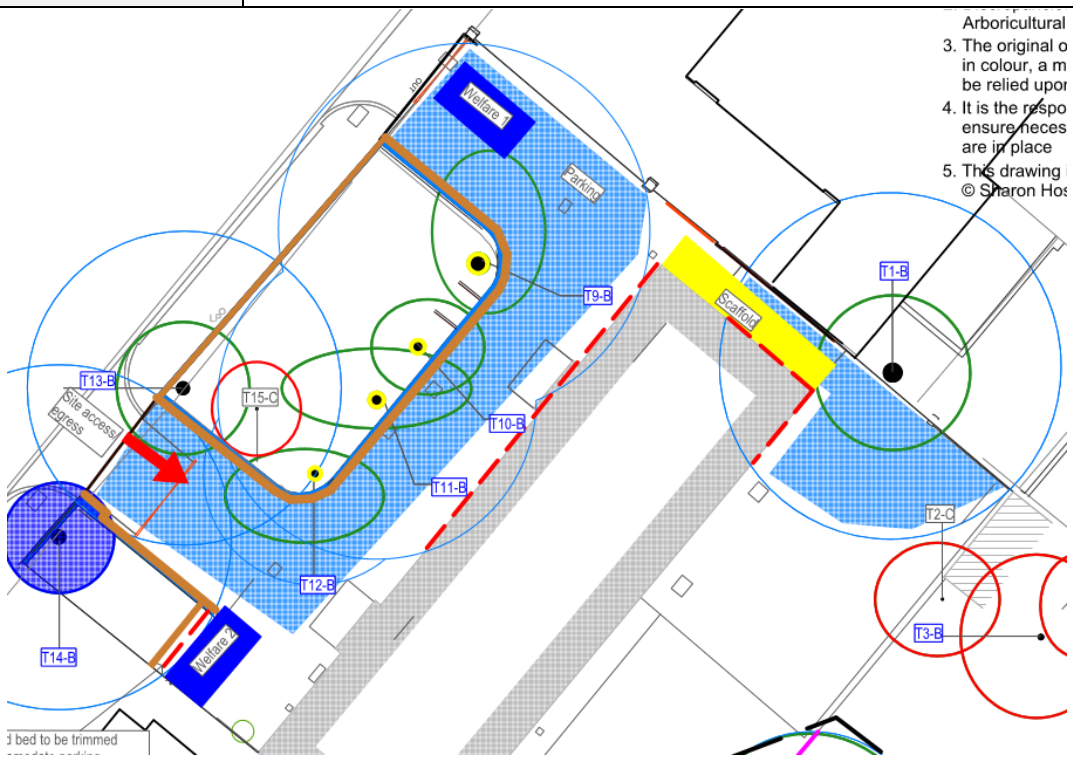
Sharon Hosegood
ASSOCIATES

Site supervision 1

Site: 248-250 Camden Road, London NW1 9HE

Client **Senior Operations Manager**	Goody Demolition Spencer Nichol from Goody Demolition
Local authority	Camden Council
Planning application number	Condition 16 of 2020/3737/P
Previous report	Arboricultural Method Statement reference SHA 1018 March 2022
Site area under discussion and background	Demolition of foundations on the edge of the root protection areas of the London Planes. Note the foundation near T1 has been retained until further investigation (unrelated to trees) takes place.
Date of visit	20/12/2022 and virtually (due to train strike) on 06/01/23
Stage in operation and purpose of visit	Demolition To check tree surgery, tree protection and removal of foundations in accordance with the AMS
Attendees	Mark and team from Goody Demolition and Sharon Durdant-Hollamby
Summary	1. Tree protection fencing in place for T5 cherry (required bracing) 2. Site hoarding around plane trees and lime tree in place 3. Tarmac retained as ground protection 4. Foundations pulled back and roots covered with hessian and plastic sheeting to provide temporary protection. 5. Works are complete from an arboricultural perspective by the Demolition contractor

Recommendations	1. That the fencing around T5 is braced 2. That the next visit takes place with the construction contractor



Plan 1 extract from SHA 1018 TPP1 A. Do not scale, north is vertical. Red dashed line is the area for demolition method statement.

Photo 1 of the completed demolition

Photo 2 of tree protection fencing for T5. In correct location. Requires bracing with scaffold poles or diagonal struts.

Photo 3 showing current rate of growth following pollarding when looking south along Camden Road

Next steps

This note and the AMS to be sent to the construction contractor

A meeting to be held with SHA and construction contractor regarding installation of the piling mat.

Circulation

Spencer Nichol

Sharon Durdant-Hollamby FICFor FArborA BSc (Hons) Tech. Cert. (Arbor A)

Director
Sharon Hosegood Associates Ltd

Sharon Hosegood
ASSOCIATES

UPDATED ARBORICULTURAL METHOD STATEMENT
REPORT, AND SITE SUPERVISION SCHEDULE
BS 5837:2012 '*Trees in relation to design, demolition, and construction' - recommendations*

PURSUANT TO RE-DISCHARGE CONDITION 16 OF 2020/3737/P

SITE:

Camden Road Hostel, 248-250 Camden Road, Camden, London NW1 9HE

CLIENT:

London Borough of Camden c/o Morgan Sindall Construction and Infrastructure Limited

Sharon Durdant-Hollamby
FICFor FArborA BSc (Hons) Tech Cert (ArborA)

DATE: April 2024
OUR REF: SHA 1741 AMS

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